THE

QUARTERLY JOURNAL

OF

ECONOMICS

*NOVEMBER, 1900*

## RECENT DISCUSSION OF THE CAPITAL CONCEPT.

To most readers the reopening of the question as to the concept of capital will seem to call for an apology. If after so much discussion the fundamental definitions have not been generally agreed upon, some will say that further argument on terms and concepts is a waste of time. While practical questions of great importance await profounder study, impatience of metaphysical quibbling is pardonable; but in recent years many students have felt that there was need of earnest effort to make clearer and more consistent the fundamental concepts. These are the tools which aid men to think on economic subjects. A flaw in these concepts, an unsuspected ambiguity in a word or phrase, not only mars the conclusions of the student, but affects the popular judgment on the most practical questions. The circumstances and special problems of former generations have caused the grouping of unharmonized ideas under one term; and it is the business of the economist to measure, mark, and correct the con-

cepts, to make the parts consistent with each other and the whole fitted to the needs of social discussion. The writer believes that there is no economic term to which this statement applies more fully than to capital, and this belief is the apology for the present paper. The concept of capital holds a central place in every economic system, and on its treatment have always depended the leading categories in the theory of economics. All agree, whatever definition may be held, that this is increasingly "a capitalistic age." The place, therefore, of the concept in all practical problems is growing more and more dominant; and a better definition of it is the most urgent need of the abstracter branch of economic science.

## I. Böhm-Bawerk.

A point of departure admirably fitted for our purpose is found in the *Positive Theory of Capital* of Böhm-Bawerk, which was given to the English reading public in 1891, and at once gained a large following. There are several advantages in beginning here. As the author's purpose was to present not only a theory of interest, but, as the title indicates, a Positive Theory "of Capital," we get the most typical cross-section of the study. We start with the known; and we direct our criticisms not against abandoned errors, but against views widely accepted.

Böhm-Bawerk undertook in his two large volumes to deal thoroughly with the theories of interest, and, to do so, was led to deal with the concepts of capital; for, thought he, it is capital for which interest is paid. However much he disputed the relation of production and interest, he had no doubt, in undertaking his study,* as to the relation of capital and interest. Interest is the yield of capital in the broader sense, and capital the source of

* We will note later his abandonment of this idea, calling the rent of land "interest" (*Positive Theory*, 355) and ascribing interest to all consumption goods, even those not included in capital. Ibid., 350.

interest. They are correlative terms. To clear the field for his own concept of capital, Böhm-Bawerk, therefore, passes in review the various conceptions of capital that have been employed. He begins by following the historical order,* and later groups the concepts in logical order.† In the chapter on historical development he begins with a mention of the mediæval view of capital as "an interest-bearing sum of money," gives a few words to Turgot's "saved goods" (a very inadequate, not to say mistaken, interpretation of Turgot's view), and passes on to Adam Smith's division of these into consumption goods and capital that brings an income. In Smith's treatment the author thinks he finds the germ of the productivity theory of interest, which he considers false. Smith, in giving two varieties of the concept,—capital as a means of acquisition to the individual, and capital as a means of social production,—has in reality given, says Böhm-Bawerk, "two entirely independent conceptions, resting substantially on quite different foundations, and only connected externally by a very loose bond." ‡ After devoting several pages to discussing this difficulty, the author abandons the historical order, and enumerates eight other variations of the concept: Hermann's "every durable foundation of a utility which has exchange value"; Menger's "groups of economic goods of higher rank [productive goods] now available to us for future periods," Kleinwächter's "tools of production"; Jevons's "sustenance of the laborer"; Marx's "instruments for the exploitation of the laborer"; Knies's goods available to satisfy wants in the future; Walras's goods which can be used more than once; McLeod's "value of the productive power contained in material goods." § These are discussed more at length in Chapter V., the most important contentions being that the distinction between consumption goods and what he calls "the true instrument of production" is essential;

* *Positive Theory*, p. 24, ff.

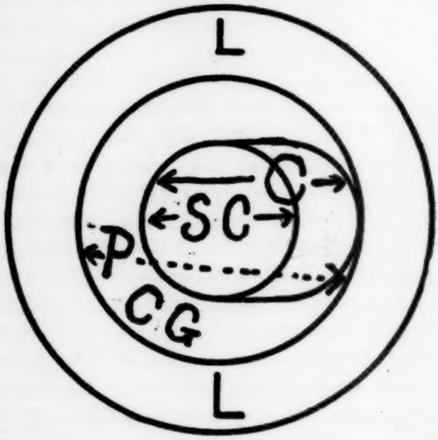
† Ibid., p. 42, ff.

‡ Ibid., p. 27.

§ Ibid., p. 31, ff.

that labor must not be confused with capital; that land must for many important reasons also be kept distinct; and that capital should be looked upon not as a "sum of value" hovering over goods, but as the "complex of goods" itself.*

Among these many variations the author gives his approval to that of Adam Smith, giving it "a more distinct formulation," † however, and distinguishing between the wider and narrower conceptions, acquisitive (private)




and productive (social) capital. Of the former he says: "Capital in general we shall call a group of Products which serve as means to the Acquisition of Goods. Under this general conception we shall put that of Social Capital as narrower conception." ‡ The problem of interest, he thinks, is connected with private or acquisitive capital, not necessarily with social or productive capital.

We may represent in the above diagram the results of the author's long inquiry. The large circle represents the entire material wealth of society. The outer band

* *Positive Theory*, pp. 43-59. † Ibid., p. 31. ‡ Ibid., p. 38.

marked L is land, or all natural agents. The entire circle P contained within that band consists of "products." The next band, C G, is consumption goods. The concentric circle S C, within, is social capital, and the oval C is "capital in general," or private capital, embracing all social capital and, in addition, such consumption goods as are let for hire. Representing this in another way, we have the following classification: —

- **Wealth**
  - **Land**
  - **Products**
    - **Consumption goods**
      - **In hands of owner**
      - **Let for hire**
    - **Social capital**

**Let for hire** and **Social capital**: **Private capital (or capital in general)**

What judgment now is to be passed on this reading of the capital concept? We must be struck by the fact that in the matter of simplicity the results of the author's study are not ideal. But he asserts with a tone of triumph that the "conception meets all our logical and terminological requirements. Logically, it is unassailable." * He concludes with this hopeful prophecy: "If, then, unbiassed people are ever to agree on the conception of capital, we may expect that this will be the one chosen." † His strongest ground for such a hope was the fact that he had made a place under the name "capital" for the two most generally employed concepts, and that the concept of social capital is the one widely held,—"products used for further production." He did not claim much originality for this part of his work. He says: "The heavy part of the *Positive Theory of Capital* lies in the theory of interest. In the other portions of the subject [he seems to mean the concept of capital] I was able, at least on the whole, to follow in the footsteps of previous theorists." ‡

The immediate reception of this portion of the author's work largely justified his hopes. His careful restatement of the concept and the authority of his name undoubtedly

* *Positive Theory*, p. 59. † Ibid., p. 60. ‡ Ibid., Preface, p. xxiii.

added to the prestige it already enjoyed. The more usual point of attack on the author has been his interest theory, not his capital concept, which has been far less questioned,* — in fact, has usually been accepted as flawless. Some protests, however, have already been raised against it; and, although it is still the dominant concept, discontent with this and other features of the older economic thought has been spreading. The earnest teacher, using the available text-books, and attempting to correct their treatment in accord with recent criticisms, is in despair. To one who has watched the course of the discussion it might seem that the service of Böhm-Bawerk's work, so far as it touches the capital concept, lay not in settling, but in reopening the whole question. Remembering, however, that most students still accept Böhm-Bawerk's statement of the concept, we turn to a group of thinkers who would give other readings to it; and we shall confine our study to the leading representatives of two differing views on the question.

## II. J. B. Clark.

This part of the Austrian writer's work, especially, was attacked by Professor John B. Clark,† who defends the productivity theory of interest, though that point we need not raise in this paper. His own views had been published ‡ at the same time as the German edition of the *Positive Theory of Capital;* but more attention was attracted to them, it is probable, as a result of this controversy than at their first publication. I shall not enter into the merits of the discussion as a whole. It was carried on

* *E.g.*, Horace White on "Böhm-Bawerk on Capital," *Political Science Quarterly*, vii. 133-148; General Walker, "Böhm-Bawerk's Theory of Interest," in *Quarterly Journal of Economics*, vi. 399-416.

† "The Genesis of Capital," *Yale Review*, ii. 302-315; "The Origin of Interest," *Quarterly Journal of Economics*, ix. 257.

‡ *Publications of the American Economic Association*, iii. (1888).

with great skill, with some later confessed misunderstandings, and at times, perhaps, with an over-subtlety which makes it exceedingly difficult to follow. I shall simply try to state the issue involved as to the capital concept.

In every-day speech and in the writings of economists there have been, since before the time of Adam Smith, two broadly marked ways of thinking of capital: one views it as concrete goods, such as tools and machines; the other, as the money expression, or market value, of the goods. It is probable that no writer has long kept from the use of the term in both these ways, no matter what his formal definition. Frequently both uses will be found on the same page. A few writers only have chosen to frame their capital concept in accord with the second of these ways of thinking.* Böhm-Bawerk has taken the former way, defining capital as the concrete goods; and in the interest problem he insists on the need of comparing goods of like kind and quantity. Clark declares this to be an error, and defines capital in harmony with the second way of thinking of it. He says, "There is in existence a permanent fund of productive wealth, expressible in money, but not embodied in money; and it is this that business men designate by the term capital." † The concrete things which make up this fund he calls "capital goods." In contrast with this list of goods he often speaks of his kind of capital as "true capital," or "pure capital," which, as he says elsewhere, "resides in many unlike things, but consists of a single entity that is common to them all. That entity is 'effective social utility.'" ‡ Again, he says: "Capital goods are . . . vanishing elements. True capital . . . is abiding." § Elsewhere he clothes his definition, which he calls "the common and practical sense of the term," in these words: "Capital is an abiding fund of wealth employed in production." ‖

* *Positive Theory*, pp. 33, 34. † *Yale Review*, ix. 307.
‡ *Publications of American Economic Association*, iii. 91.
§ *Yale Review*, ii. 308. ‖ *Quarterly Journal of Economics*, ix. 257.

Needless to say, Böhm-Bawerk defends himself vigorously against the charge of "side-tracking" the theory of capital in defining the concept as he had done. The controversy turned about the phrase "goods of like kind and quantity," and the question as to the real nature of the comparison of present and future goods. Clark holds that it is two sums of "quite different goods" that are compared. Böhm-Bawerk saves his phrase by the expedient of making the "goods of like kind and quantity" mean "dollars," "exactly as does Professor Clark." * This is not a novelty with him; for, as he points out,† he had "in many, and in some of the most important, passages of the *Positive Theory of Capital* . . . used money as an illustration of the proposition that present are worth more than future goods." Without quite indorsing Clark's comment on this point, we may agree with him that this appears to surrender the entire question concerning the formula "of like kind and quantity." ‡ What meaning is in the phrase "the technical superiority of present goods over future goods," when those goods are made to mean dollars? What becomes of the elaborate analysis of the roundabout method of production? § Certainly, it means something very different, when the present goods employed are taken merely as circulating medium which is not in the normal case retained by the individual producers nor used up by society. The truth is, Böhm-Bawerk had fallen into the common error of using two different conceptions of capital, and at the first attack was found in an untenable position. This phase of the controversy seems to end by showing that the conception of capital made use of by Böhm-Bawerk himself, when he discusses business problems, takes the money expression, and differs in important ways from that of concrete goods expressed in his elaborately framed definition. A word as to the relation of these two views. It is to be noted that both parties

* *Quarterly Journal of Economics*, ix., 116.
† Ibid., 380.
‡ Ibid., 263.
§ *Positive Theory*, pp. 17-23.

agree that economists must study wealth under both these aspects. Böhm-Bawerk admits that he does so. The point against him is that, while framing his concept and basing his argument as to interest on the first, he introduces the second view, in some ways inconsistent, without recognizing the shift of concept. And Clark says that "the issue is not whether concrete capital goods are or are not to be studied at all. For certain purposes they have to be studied." * But he would confine the term "capital" to the sum of wealth or "permanent fund" constituted of the perishable goods.

The conception championed by Clark is of great significance; and, before going further, it is important to consider some peculiarities and difficulties in Clark's way of setting it forth.

(1) The discussion is confined by Clark at the outset to social capital.† He uses this term in a wider sense than Böhm-Bawerk does (as is explained in the next paragraph), but not differently as to the exclusion of consumption goods. Social capital is that kind which Böhm-Bawerk himself considers to be productive. Clark gains thus a distinct tactical advantage over his opponent in upholding the productivity theory of interest, though that is not of immediate importance to us here. The fact, however, that Böhm-Bawerk does not note this limitation, but fights the issue on the ground chosen by his adversary, shows that he himself is caught in the confusion of the two concepts, and is the strongest evidence of the inexpediency of the division of capital into social and private.‡ On the other hand, the fact is of immediate interest to us that Clark gives this narrower content to the term "capital," confining capital to "material forms of wealth that do not directly minister to consumers' wants," § and does not make a place for acquisitive consumption goods, nor ex-

* *Quarterly Journal of Economics*, ix. 258. † *Yale Review*, ii. 304.

‡ A fuller discussion of this point is given later, p. 21.

§ *Yale Review*, ii. 307.

plain the interest from them, as is done by Böhm-Bawerk in his concept of private capital. In this respect the concept evidently needs addition or correction.

(2) In the second place, Clark's explanation of the genesis of capital is inconsistent with his own concept. Land used productively — for example, a farm, a waterfall, a mine, any rare and useful natural agent — is capital according to his definition. In his earlier utterances, such things are in plain words included.* In the later articles this is still the inevitable implication of the definition,— "a fund of productive wealth expressible in money"; but a reader new to the author's doctrine would find no specific statement to this effect, and there would be small chance that the meaning in question would be gathered. The whole logic of the argument is against it. "The genesis of capital," we are told, "takes place by a process for which the good old term 'abstinence' is, as I venture to maintain, the best designation." † This does not seem to give a place in capital to natural agents. There are, we are told, two classes of accumulators: the typical capitalists, who save to make permanent additions to their capital; and the quasi-capitalists, who "save sums now, intending to spend them later." ‡ There is no place here for the unearned increment of a newly discovered mine, which to-day forms for many men the chief productive wealth expressible in money. If this is saving, it is a sense so unusual as to require a special explanation by the author; and it is difficult to see how it can consistently be given. There certainly would be no attempt to evade the real question by assuming that the dollars that bought the mine had been saved; for the mine may not have been sold, and, if so, it is irrelevant to the issue. If the definition adopted by Clark is consistently applied, there are necessarily many things forming a part of capital which never have been saved, and which never have called for

* *Publications of American Economic Association*, iii. 95, 112.
† *Yale Review*, ii. 309. ‡ Ibid. 303, 304.

abstinence, as Clark employs that term.* In fact, Clark seems to show here, as did Böhm-Bawerk, some traces of the error of the labor theory of value, so difficult to throw off.†

(3) Again, Clark would seem to err by extreme statement in making it in the nature of capital to be a "permanent fund." "In creating capital, we put the personal good away from us forever. . . . An addition to the social fund of perpetual capital is brought into existence." "Nothing generates capital that does not add to the permanent fund of invested wealth." ‡ "True capital . . . is, in the absence of untoward accidents, perpetual, and yields perpetual fruits." § Many other expressions emphasize the same thought. Now this evidently does not apply at all to the author's quasi-capitalist, who saves to spend later. That, of course, is why he uses the term "quasi," which evades the issue. Either such savings are capital (in which case why quasi?) or they are not capital, and may be omitted from the concept. The author, after stating that a part of the accumulation of capital is due to these quasi-capitalists, proceeds as if there were none such. If better or more tools and larger stocks were accumulated, and were then allowed to deteriorate while in use without being replaced, our author must certainly call them capital while they lasted; and, if so, the element of permanency is no essential part of the capital concept. Indeed, if a fund of productive wealth must be permanent to be capital, we cannot be sure that there is any such a thing; for we have not the gift of prophecy, and all

* *Yale Review*, ii. 309. I must dissent from Clark's opinion that the term "abstinence" is, in the discussion of value theories, to be applied only to the first act of saving. See this view in *Quarterly Journal*, ix. 260, 261. In a more useful sense it is a power of choice that is continuously present during the foregoing of the right to consume wealth, at every moment during which a man could convert the principal of interest-bearing capital into a source of present enjoyment.

† This point is treated more fully later, p. 30.

‡ *Yale Review*, ii, 309. § Ibid., 312.

human interests are fleeting.* Clark himself says, "Capital.... normally will never perish"; but "this is not saying that no capital ever perishes in fact." † This says clearly enough that permanency is not an essential mark of the concept, and makes meaningless both the word itself in that connection and a number of sentences, besides those quoted, in which this feature is emphasized as a vital mark of the concept. There is a valid thought in his contention, but it is not that capital is in its nature perpetual. There is ambiguity in the phrases "increase of capital" and "decrease of capital," because they may mean either some of the parts or the whole. A part of capital may perish while the total amount of capital is preserved or even increased. Clark would confine the expression to the whole of capital, and objects to the form of statement "capital is destroyed" when the value of the concrete goods is passed on to other goods. But what of the cases where the total value is not preserved? The zeal of his attack carries him to an extreme and untenable expression, and makes him insist upon an unessential.‡

(4) Less successful than his contention against Böhm-Bawerk about "goods of like kind and quantity" is Clark's claim that capital "synchronizes all industry and its fruition," that because of capital "industry and its fruition are simultaneous." There are several objections to such an expression.

(*a*) I am not quite in sympathy with the point of view of either of the parties to the discussion, but between them it is a question not as to what happens,—not of fact,—but of expression; and Böhm-Bawerk's opinion commends itself when he says § it is a "figure of speech" that is "misleading" to say that the real wages, consisting of "consumption goods" received to-day for work done on goods not to be completed for years, are the "true and

* This has already been observed by Fisher, *Economic Journal*, vi. 530.

† *Yale Review*, ii. 309.

‡ See further on this, *infra*, pp. 15-16.

§ *Quarterly Journal of Economics*, ix. 124, 125.

immediate fruit" of, *e.g.*, the tanner's labor.* To the tanner, of course, they are the "immediate" and only fruits, since they are all he gets for his labor. The question is, does it seem logical and expedient from the general standpoint in economic discussion to consider and speak of them as the "true fruits" of that day's labor? The expression chosen appears to say merely that these things express the present market value of the laborer's services; that is, it is a roundabout and somewhat whimsical way of stating the truism that they are the man's wages.

(*b*) Further, it may be urged that the inaptness of this expression is more apparent when something other than subsistence goods are considered. In the example chosen of the tanner, it is at least debatable whether it is best to call the shoes he gets to-day the "true fruit" of his labor. But in the case of the laborer receiving food and clothing for digging a canal or working on a marble palace, it is straining the point further to use the expression. If here, too, his wages are called the "true fruit" of his labor, it still appears that the peculiar power ascribed to capital is due only to one part of capital, the finished consumption goods. No matter how large a stock of capital in the form of machines, buildings, and raw materials may be on hand, if there be no stock of finished goods, labor and its results are not synchronized.†

(*c*) A further objection to this way of conceiving of the nature of capital's work is that it would, if true, be applicable only to "produced" forms of capital. As indicated by the phrases "industry and its fruition," "labor and its fruits," it implies vaguely the labor theory of value as to the origin of capital. The picture of labor continuously flowing into the reservoir of capital and consumption goods at the same time flowing out ‡ is not satisfactory as

* *Yale Review*, ii. 312.

† This is a somewhat different presentation of Böhm-Bawerk's argument in *Quarterly Journal of Economics*, ix. 125–128.

‡ *Yale Review*, ii. 310, 311.

applied to products; for it implies that the inflow of a quantity of labor forces out consumption goods whose quantity is determined or measured by the quantity of inflowing labor. The value of consumption goods flowing out, however, is greater in varying degrees than the value of labor flowing in; and it is only through their values that we can compare at all the quantities of the two streams. Further, it is not a happy figure; for it suggests that all the goods that are a part of capital will eventually become consumption goods, whereas in many cases this is not expected nor desired. It is significant that Clark in describing the process speaks only of "the materials, raw and partly wrought," of which an article for consumption is made. He ignores machines and durable goods. It is only in the gradual passing on of their value, as they are used up, to the things that are made by them, that machines and more durable agents can be said to ripen at all.* Even Clark's value conception of capital, however, though it explains this point better than does the concrete concept of capital, does not avoid the difficulty. The point may be most clearly seen in the case of natural agents, which, as we have noted, are in Clark's treatment included in the "fund" of capital. If we consider not merely capital in the form of products more or less fitted for consumption, but, as his concept requires, durable natural agents also, the phrases we are criticising appear hardly short of absurd. Clark forgets this kind when he says: "The capital goods that are set working are not permanent. They pass away, and are replaced." † Natural agents, the field, the waterfall, in so far as they are thought of apart from betterments upon them, have not been originated by labor; and they are not in a state of transformation that will eventually ripen them into consumption goods.

* Böhm-Bawerk appears to have very much the same conception of products ripening into consumption goods, in his circles of production periods. See *Positive Theory*, 93, 106–108.

† *Yale Review*, ix. 312.

They stand there to be used by man, if he wishes, as an aid in securing future harvests or products; but neither the things themselves nor their value or money expression are "synchronizing" labor and its fruits. If there is any synchronizing, it is done not by this, but by some other part of capital, and is, therefore, not an essential mark of the capital concept.

(5) It is likely that to some points in what has been thus far said the answer will be made that they are due to misunderstanding of the author's meaning. No doubt the author attaches great weight to the contrast he draws between true capital and capital goods, which it might seem I had neglected. The reply is a criticism stronger, perhaps, than any of the foregoing against Clark's capital concept. There is in his mode of thinking of this contrast an over-abstraction that is neither expedient nor logical; and there results in his presentation some inconsistency of thought and statement. In some passages, capital is said to be as concrete a thing as can be. It "consists in goods. It is not an abstraction, and it is not a force independently of matter. It has substance. If at any instant we could collect in one place all the material forms of wealth that do not directly minister to consumers' wants, we should have the fund for the moment before our eyes in substantial embodiment." * Capital is thus "productive wealth, expressible in money, but not embodied in money." † That is plain enough, and we are still on solid ground: we are not puzzled here by the "entity, effective social utility," of the earlier statement,‡ where capital does not consist of the concrete things, but is the "fund that resides in many unlike things," and is "embodied in instruments of production." This has the unpleasant flavor of Marx's labor jelly, though it need not be taken as more than a loose, convenient way of expressing the market value of the concrete things. But

* *Yale Review*, ii. 307. † Ibid.

‡ *Publications of American Economic Association*, iii. 11.

the development that follows of the paradoxical contrasts between capital goods and true capital appears to be mischievous subtlety. The very adjectives "true" and "pure" applied to capital are suspicious. Why not plain "capital"? We are told that "the genesis of capital goods is unlike that of capital." * It would seem that, if capital consists of concrete goods, then making concrete goods is making capital. But the author says not, unless those goods are net additions to the stock; that is, more than replace the capital destroyed in the same time. "Build an altogether new engine. That is creating capital. Renewing an old one is only preserving capital." † The simple mode of expression that some capital has been created, while an equal amount has been destroyed, is thus not to be permitted. Surely, since capital has substance and consists in goods, there is only one way in which its amount can be preserved while some of it is being destroyed; and that is, by "creating" more capital to replace that destroyed. And what would be the circle within which the balance must be struck? Would it be the individual, the national, or the world economy? If John builds a machine while his neighbor lets one decay, then has John created no capital? It is true that care is often needed, in speaking of any increase, to indicate whether it is a net increase or not, but no more needed in the case of a "fund of capital" than in that of a herd of cattle. The striking antithesis of the goods that make up capital with the capital itself appears thus to be over-abstraction and unreality.

To sum up the objections to Clark's conception of capital: ‡—

(1) It includes only goods used in "production," and

* *Yale Review*, ii. 308. † *Quarterly Journal of Economics*, ix. 275.

‡ This article was in the editor's hands before the appearance of Professor Clark's latest work, *The Distribution of Wealth*. The views of the author on the capital concept there expressed show no essential change from those here examined, and the criticism stands as first written.

does not recognize nor prepare to explain the interest-bearing qualities of consumption goods.

(2) It is confused in attributing the genesis of capital to abstinence (as he uses that word) while including in capital natural agents for whose origin no abstinence was required.

(3) It errs in making permanency, or perpetuity, an essential mark of capital.

(4) The statement that an important, if not the chief, function of capital is to "synchronize industry and its fruition" is a misleading figure of speech. It can be affirmed, even figuratively, only of the part of produced goods that is to be at once consumed, and is quite meaningless as applied to the durable natural agents which are a part of his capital concept.

(5) The conception, starting from concrete goods, is developed away from them into a more abstract, dematerialized "pure" or "true" capital, which is put into contrast with real things.

## III. Irving Fisher.

We now turn to the notable contribution of Professor Irving Fisher.* He lays a basis for his own treatment with sound statements as to the requisites of a good definition, and careful studies of the definitions and usage of the leading authorities. He believes that a mistake has been made as to the real character of the problem, that it is not one of the classification of wealth, and that unavoidable difficulties "attend every effort to delimit capital from 'other wealth.'"† His own conclusion, then, is that capital should be taken to mean simply all wealth at a point of time.‡ It is contrasted not with other wealth,—for that category is exhausted,—but with the same wealth as a flow during a given period, and at a rate. The con-

* In three articles, *Economic Journal*, vi. 509; vii. 199, 511 (1896-97).
† Ibid., vi. 513. ‡ Ibid., p. 514.

trast, then, is between a stock and a flow, and still more important "between stock and *rate* of flow." * This conception is ingeniously developed, use being made of mathematical terminology, and is applied in criticism of rival definitions. Finally, the attempt is made to show how it could be employed in the discussion of various economic questions.

To grasp more fully the import of this radical proposal in economic terminology, let us note in what regards it differs from the conceptions we have been considering.

(1) Its content is wider than that of any foregoing concept. Böhm-Bawerk excludes all natural agents and most consumption goods from his wider concept, private capital, and excludes the other consumption goods used in acquisition from the narrower concept of social capital. Clark appears at first to include all natural agents, though excluding all consumption goods, then treats capital as if it originated only in labor, and did not include natural agents, and finally mystifies us by his contrast of capital goods and pure capital, leaving us in doubt whether he would include any concrete things as such. Fisher's concept takes them all in, sweeps down the wall between the old concept of capital and consumption goods on the one hand and natural agents on the other. To my mind this suggestion is the most fertile part of Fisher's discussion.

(2) It agrees with Böhm-Bawerk's and differs from Clark's conception in considering that the concrete things should be estimated by physical measurements, and not in their money expression. The objection to Clark's view in this regard, he says, "is not that this summation of value is inadmissible, but that it is a secondary operation. Objects of capital are antecedent to the value of those objects. . . . Wheat must be measured in bushels before it is measured in dollars." † He, therefore, finds it a "serious objection to Clark's definition" that he endeavors "to in-

* *Economic Journal*, vi. 515. † Ibid., p. 530.

clude different sorts of capital in the same fund, reduced to a common equivalent in terms of value." Here, in my opinion, is a radical defect in Fisher's view. (*a*) It is true that wheat must "be measured in bushels before it can be measured in dollars," but it must also be tested for quality. One will not value as highly a small apple as a large one, a sour as a sweet one, a rotten as a sound one. We could thus say that apples must be measured in sweetness before being measured in value. But an inventory of all possible measurable qualities, while helpful in estimating, would not itself express the amount of capital, for the things might after all have no value at all. (*b*) Though an intelligible description of the quantity of any single kind of goods could be made in such terms, yet the total quantity of many different kinds of goods cannot be expressed for economic purposes in a single sum excepting in terms of value. A capital account in which five pounds of feathers were added to a bushel of wheat and a yard of cloth would give a curious total. (*c*) Fisher is inevitably betrayed into inconsistency when he comes to estimate the quantities of wealth, and express in percentages the relation between the stock and rate of flow; for this can be done only by comparison of values.*

(3) This conception shares what I believe to be an error, common with it to both of the others,† in that it makes the income of a community consist of "streams . . . of the very same commodities" ‡ that compose the total capital. This, again, implies that all things of value originate in labor, and are on their way towards the goal of consumption goods: whereas many things, standing where they are, may be made to push other things towards that goal, though never getting nearer to it themselves; *e. g.*, machines and natural agents. Fisher means by income a "flow of things" (material things), and rejects Mr. Edwin Cannan's conception "of income as a flow of pleasure," or

* *E.g.*, at the very outset, *Economic Journal*, vi. 515.

† See as to Clark, *supra*, p. 14.

‡ *Economic Journal*, vi. 514, ff.

satisfactions.* The book-keeping of society will be thrown badly out of balance if services be not counted as a part of income; but, even if services be included as a part both of income and of capital at a point of time, there are still many things, as above indicated, that are a part of Fisher's capital only, and never are a part of the flow of income. They never have been made for consumption, and never will be fitted for consumption.

(4) A final objection is that the term "capital" is made synonymous with wealth, and two good words are employed in the same sense. Fisher anticipates this objection, and recognizing its validity, if the fact be true, defends by saying that wealth presents the two aspects of income and stock (capital),— differences important enough to merit separate terms. This defence fails, if the point made in the preceding paragraph is sound. By wealth, Fisher must mean here "all wealth." As I have shown, all capital must be considered wealth, and all wealth capital by Fisher's definition, though all wealth has not been nor will all wealth become income. Wealth and capital thus are synonymous, while income differs from them not merely as an aspect, but in the group of goods which composes it.

The concept under discussion is credited in part to Professor Simon Newcomb, is indorsed in the main by Mr. Edwin Cannan, and has received the approval of Professor Hadley in his *Economics*. Its merits and the ability of its presentation by Fisher have surely attracted other followers to one or another feature of it. It has therefore a worthy standing among the competing conceptions. Some portions of the presentation are most illuminating, and must be looked upon as distinct contributions to economic theory. Careful distinction between a stock of capital regularly employed, the turn-over in a business, and the income from a business have not always been

* *Economic Journal*, vi. 534.

made; and confusion has resulted. But this difficulty is not such as to call for the construction of the capital concept with that distinction as the central thought. On the whole, there is little probability that this conception will triumph, its defects both as to consistency and expediency being of an essential nature, its points of merit being capable of adaptation to another and better central thought.

We now have finished our review of the more notable recent conceptions, rivals to that put forward by Böhm-Bawerk. Though confined to a few names, it has necessarily taken a somewhat wide range in the points considered. It is hoped to use the fruits of this study in the next two divisions, in which the analysis of Böhm-Bawerk's conception is resumed. I shall then go on to formulate more positively a capital concept which will be free, I trust, from the many objections that have been considered.

## IV. Private and Social Capital: An Illogical Distinction.

I have sought in the foregoing to give a clear statement to the capital concept of Böhm-Bawerk and its recent rivals, those of Professors Clark and Fisher, to show the main points of difference, and finally to criticise in some detail the conceptions of these later writers. We are now prepared to return to the criticism of Böhm-Bawerk's views which were the starting-point of our study, and, taking up more thoroughly than before some of the issues involved in his definition, to work towards a positive conclusion.

The distinction between private and social capital is considered by Böhm-Bawerk to be of the very greatest importance, and he deems his clear distinguishing of them to be one of his highest services to economic theory. The failure to distinguish them, he thinks, is the chief

reason for the "false" productivity theory of interest. If the difference is not seen between capital, the source of interest, and capital, the tool in production, interest, he argues, is naturally thought to be due to productivity. But, if it is clearly seen that a part of interest-bearing capital is not a tool in production, then productivity cannot be the one essential explanation of interest. This point was evaded by Clark, as I have shown;* for he simply considers social or productive capital, and omits mention of acquisitive consumption goods. It was not raised in his discussion with Clark by Böhm-Bawerk himself, for his attention was fixed on other points; but in his reply to Walker it is put very clearly. "There is interest without any production whatever. . . . I refer, for example, to interest on consumption loans and to the return on durable consumption goods, such as rented houses, pianos, and the like." † Private capital is, by his view, social or productive capital plus some other things, enjoyable and more or less durable products let for hire to the user. Of what importance is this class of goods that makes all the difference between the two concepts? He has here mentioned rented houses and pianos: the stock illustration is the masquerade suit let by the costumer. A complete list of these articles would include a very small amount of wealth compared with that in social capital, and, doubtless, very much less than that in the rest of consumption goods. Yet it would be wrong to claim on this account that it is not worth while to make a difference in the concept. Logical differences of any importance call for distinctions in concepts, no matter how slight be the quantitative differences. I pass, therefore, to a criticism of the logical grounds for such a distinction.

(1) There is no need to make an independent conception on account of this group of income-bearing things, if an explanation can be given that will dispose of them in a

* *Supra*, p. 9. † *Quarterly Journal of Economics*, ix. 253.

simpler way. Here are two houses lived in by the owners in two neighboring towns. They are called consumption goods, bearing no income. Owner A moves into another house, paying $300 rent, letting his own for an equal sum. His house then becomes acquisitive capital. Owner B does the same, and his house becomes capital. Chance or choice leads each to occupy the other's house. Each, through a broker and without knowing who his tenant is, pays the other $300 yearly, and both houses are capital. Shortly, they move back into their own houses, which at once cease to be capital; and the "income" of each man is reduced $300.

The puzzle is an old one. It compels us to say that a thing becomes capital or ceases to be capital not because of any change in its physical or economic nature, not because it is more or less serviceable to the community, not because the use to which it is put is altered, but simply because the man who owns it does or does not happen to be the one who enjoys that use. Now Böhm-Bawerk himself, in his interest theory, has given us a hint of the way such an absurdity can be avoided without the use of a separate concept,* though he does not see the application possible here. The person who rents a house buys the "material services" of the thing during a definite period. The whole value of the house is simply the sum of a long series of uses. To the logical eye, though not to the technical eye of the law, the tenant or user is the owner of the thing during the time, with only such conditions as will insure its safe keeping and return at the close of the period. It may be looked upon as a sale to the tenant of a use or a group of uses defined by a period of time, and with the agreement to return the use-bearer when a group that has not been purchased begins to mature. The value of the unpurchased uses does not appear in the transaction, but they are bound up with the

* Especially in *Positive Theory*, 339–349.

use-bearer that is given and returned. The dancer is often compelled to deposit the price of the masquerade suit when he takes it out. After the ball is over, his subjective valuation having fallen, he is the gainer by returning it at an agreed price which to the costumer represents its worth as stock to him. The latter keeps such things in stock because there are, on an average, enough such sales to pay his trouble, expenses, and a return on that amount of stock. Such rented consumption goods, being owned for the time by the user, form, then, no exception to the general class of consumption goods. The income of the dealer or the house owner is explained as a profit gained in exchange, like that of any other retail merchant, and includes a payment for services, risk, and income from stock employed. To explain such transactions as the sale of a group of uses (which is actually the temporary sale of the use-bearer) is entirely consistent with Böhm-Bawerk's treatment of interest, and makes needless the elaborate distinction between private and social capital.

(2) The foregoing would seem to be a valid reply, at all events as an *argumentum ad hominem*, to Böhm-Bawerk; but it may appear to some to be too elaborate and artificial. The distinction in question may then be attacked on the still stronger ground that it confuses things economic and legal. It is based on an unclear view of the relations of economic and contract interest. Let us look at this distinction. Contract interest is the interest actually paid by one person to another as the result of an agreement. Economic interest is the advantage attributable to the possession and use of a thing during a given period, regardless of its ownership. There is economic interest when a man uses his own plough to raise a crop or his own storeroom as a place of business.* Now, in the case of all the things included under social (productive) capital, contract is based on and tends to conform to economic interest. In all

* I should add, if the income is estimated as a percentage of the capital value.

such cases it is economic interest that we seek to explain logically through the economic nature of the goods. Contract interest is a secondary problem,—a business and legal problem,—as to who shall have the benefit of the income arising with the possession of the goods. It is closely connected with the question of ownership. Only by accident, mistaken judgment, or old agreements, can the contract interest connected with social capital continue when economic interest does not. The two are related as cause and effect. Yet in the case of the relatively small group of consumption goods let for hire there is in the current view here represented by Böhm-Bawerk only contract interest, there being supposed to be no economic interest on which it is based. The economist's problem in distribution is essentially an impersonal one, to determine the economic contribution regardless of the question of legal ownership. Here, if it be held that there is no economic interest or contribution, we have an anomalous case where the final answer to the interest problem must contain a mixture of economic and legal elements. No solution of this contradiction will, I believe, be found short of the view that contract and economic interest are normally inseparable. By "normally" I mean that no man contracts to pay interest, or, being free to choose, actually does pay it, unless he has reason to believe that he thereby will gain the benefit of what must be called economic interest of a somewhat greater amount.

(3) This brings us to another objection to the distinction between social and private capital; namely, that it involves a wrong conception of the nature of income. I shall maintain that income must be looked upon as a series or group of satisfactions, not as a series or group of material things. Though scattered authority may be found for this view, it is at variance with the views alike of Böhm-Bawerk, of Clark, and of Fisher, as well as those of the great majority of economists, and requires explana-

tion and defence. The thesis is that the economic goods which are "produced" either by human effort or by the material services of goods must, in their last analysis, be looked upon as satisfactions. Böhm-Bawerk notices this view as expressed by Roscher, and rejects it;* yet the view is one peculiarly in harmony with the psychological treatment of value which Böhm-Bawerk favors. Indeed, it seems to me the view to which that value theory logically and inevitably leads. Roscher fails to apply this thought consistently, as Böhm-Bawerk rightly shows;† and with that we will not concern ourselves. The view suggested looks upon all material goods as means of production or capital, their value being derived from the states of satisfaction to which they minister or which they enhance. Böhm-Bawerk's objection to this lacks validity. He says: "Any unbiassed person can see how unfortunate this is. Without due cause it obliterates the very important distinction between the production of goods which satisfy want and their consumption. It christens, for example, the idler as a zealous producer, always thinking how he may produce the personal goods of satiety, of ease, of contentment, and so on." It needs only to be replied to this that the idler in such case would be wrongly christened. The term "means of production" must be confined to objective means of producing a subjective state, not to subjective states, to Buddhistic dreams that unite the dreamer with Nirvana. The pleasure of basking in the sun is a fact of which economic theorists must take note; but that pleasure can be secured usually by the use of free goods, and thus is not an economic satisfaction. It becomes an economic satisfaction when it is conditioned on the control of some scarce material agent or can be secured only by effort. The test, then, of economic personal goods or satisfactions is dependence on either objective things or persons, or on

* *Positive Theory*, p. 44. † Ibid., p. 45.

reaction against the outer world by the man seeking the satisfaction. If the objection of Böhm-Bawerk is urged beyond the extreme and inapplicable example he has given, and is applied to the personal services of one man for another, it leads to the old and abandoned distinction between productive and unproductive labor. We do christen many men "as zealous producers because they are producing the personal goods of satiety,"— in other men. Such services must be counted as ephemeral forms of wealth, enjoyed or consumed at the moment of their production. This is no more obliterating the distinction between production and consumption than eating a hot cake fresh from the griddle obliterates that distinction. The two things are as logically separable in thought when they occur simultaneously as when a second or a decade intervenes. We have ceased to consider it essential to "productive" labor that it should be first embodied in material form, however fleeting. The same untenable distinction is adhered to almost universally in the case of the services of material goods. Their productive contributions must be put on the same basis as those of labor, to be measured by the intensity of the wants they aid in satisfying and the psychic states they help to produce. The house of the mill-owner is, logically considered, producing directly, his mill is producing indirectly; for only after a devious journey will the contribution of the mill reach its goal in the satisfaction of wants. Our economic book-keeping can be made to balance only when *real* income be looked upon as a flow of pleasure in all cases, not as a flow of goods in some and a flow of pleasures in others, as is done generally now.

(4) This view makes possible the correction in the concepts of private and social capital of another fault which calls for our fourth and last objection to this part of the almost universally accepted treatment. The fault is this. Interest is looked upon as connected with a special class

of goods: it must be recognized to be connected with everything of value.* The value of anything is built up on its uses or services to men. Wherever there is a postponed use, that use is subject to a discount. Its present worth is less than its worth will be at maturity. Consider the case of consumption goods. In the orthodox view a bushel of apples, kept by the grocer from fall till spring, is capital, and normally shows economic interest in enhanced value. Bought in the fall and stored in the cellar by the housewife, it is a consumption good; and economic interest is absent. But that early purchase can only be rationally explained as we take account of the increment of value on the apples thus stored, and this is economic interest. Larger purchases in advance effect, of course, economy of labor, and bring an additional motive to make them; but this is not saying that the whole saving is wages, and that no interest is gained.

The radical consequences of this view are evident. It erases all distinction between the essential economic character of so-called productive and consumption goods. The term "consumption goods" may still be conveniently retained to mean, as at present, the material good in its final form in the hands of the one intending to use it; but it ceases to be an essential economic category. Every material good and every human service has value only as it is a condition to the satisfying of a present or prospective want. The abiding value of the diamond is built on no more substantial foundation than its flash and sparkle. Market values are the capitalized economic contribution of objective agents to psychic states; and these states are the final, highest, only essential economic products.

To sum up the objections to the concepts of private and social capital: —

(1) The distinction between them rests on a supposed

* Here we develop some of the thoughtful suggestions of Fisher, though differing with his view in ways already suggested. See *Economic Journal*, vii. 525.

difference in the interest-bearing character of different groups of consumption goods. This difference can be explained in a simple way that makes needless an additional concept.

(2) The distinction between them rests on legal, not on economic grounds, and involves a confusion of economic and contract interest.

(3) The distinction rests on an incomplete and illogical view of the nature of income and the services of goods. The income that needs to be explained by economic theory is the flow of objectively created pleasures coming to the individual and the community.

(4) In these concepts the interest-bearing quality is confined to the conventional production goods and such consumption goods as yield contract interest. Many actions connected with "consumption goods" are left unexplained. The interest phenomenon is found wherever there is abiding value.

Our conclusion, then, is that the distinction between social (or productive) and private (or acquisitive) capital rests on illogical grounds. Böhm-Bawerk thinks it a great advantage that "notwithstanding the material difference there is between capital, the factor of production, and capital, the source of interest, it is not necessary in [his] reading to make two conceptions of capital that are entirely foreign to one another." * We must assert on the other hand that the two conceptions he has given us are so largely foreign to one another † that, instead of an advantage, it is a source of much confusion that they are called by the same name, as every careful reader of Böhm-Bawerk's work must have noted. For example, he defines capital at the beginning of his discussion ‡ as "nothing

* *Positive Theory*, p. 40.

† Ibid., p. 61. He says here, flatly contradicting his own words just quoted: "Substantially, [the conception of social capital] is a quite independent conception. In every essential respect (in definition, in scientific employment, and in scope) it stands on entirely independent principles."

‡ Ibid., p. 22.

but the complex of intermediate products which appear on the several stages of the roundabout journey." By this he evidently means his social capital; and he then proceeds to show that "capital in general"— that is, private capital — is something more than such a complex. The reader is frequently in doubt which one of these different concepts is designated when the word "capital" is used. A great advantage will be gained when, dropping unessential distinctions, we are able to save the term from double meanings.

## V. Capital as Product: The Labor-value Fallacy.

Thus far we have considered only the question of the uses to which goods are put as determining whether they are capital. Böhm-Bawerk's definition, however, in common with nearly all usage, limits the conception of capital in another way; namely, with regard to its origin. As well private as social capital consists of a "group of products." In the foregoing, I have widened the term productive as applied to consumption goods; but the products there mentioned (feelings, satisfactions), being ephemeral, do not increase the capital stock existing at a given moment. And, being final products, these states of feeling cannot be used in further economic processes, and do not, therefore, widen the definition Böhm-Bawerk has given us. The test so far applied to these concepts has been alone that of economic function. Confining capital to material "products," as does Böhm-Bawerk, applies an additional and distinct test,— that of economic origin,— and must be separately examined.

The purpose of the adjective "produced" in the phrase "produced means of production" is to exclude land. While conceding that there are some good reasons for including land under capital, Böhm-Bawerk declines to do so for the reasons which we may enumerate, as follows: —

1. Land is immovable. Capital is, for the most part, movable.

2. Land is a gift of nature. Capital is a result of labor.

3. Land cannot be increased, capital can be.

4. The social and economical position of the landlord is essentially different from that of the capitalist.

5. Property in land and property in movables are justified on essentially different grounds, and they are commonly attacked by quite distinct people.

6. Land is the special agent in a kind of production [agriculture?] that is economically distinguished by many important peculiarities.

7. The income from land differs in many ways from income from capital.

8. Using capital for all material means of acquisition leaves us no name for produced acquisitive instruments.

9. Popular usage does not put land under capital, but opposes the two.

10. Usage does not apply the term "interest" to the income from land.*

He concludes that "it is most convenient to keep land quite distinct from other kinds of productive wealth," and that "there is a considerable balance in favor of defining capital as the 'produced means of acquisition,' and against the inclusion of land." †

Of this formidable list it must be said that not a reason given, considered singly, is free from flaw, some are quite mistaken, and collectively they are not conclusive. The worth of 1 is destroyed for purposes of definition by the limitation "for the most part." It is not that a definition may not be based on a difference in degree, where qualities grade off from one extreme to another; and, if something of importance depends on the degree, it may often be expedient to draw a line of division more or less arbitrarily somewhere. Here, however, it is not so. Things, like houses, ditches, trees, that are as firmly fixed

* *Positive Theory*," pp. 55, 56. † Ibid., p. 56.

as the soil itself and whose value would be quite lost if they were moved, are, without a question, included in capital. Turning to the other part of the statement, that land is immovable, it is found quite as untrue. Parts of land are shifting from day to day. It is usual for those who follow this definition to consider that a thing ceases to be land and becomes capital the instant it is moved by man's agency or effort; but to appeal to this to prove the point is to confound "unmoved" with "immovable." No matter is immovable. To say that "land" means something that has not been moved by man begs the question, and this is evidently an untenable definition of nature or material agents. Some writers who have followed out such reasoning have been led to narrow the essential concept of land down to mere situation,* or, differently expressed, to the "geometric relations in which any part of it stands to other parts." † This is a very different idea from the one here defended by Böhm-Bawerk, and would not be consistent with some of the other reasons of this list. Reason 1 in the list appears to be an illogical use of reason 2, it being falsely assumed that results of labor are necessarily movable in the relative sense in which we can use that term of material things, and that gifts of nature are immovable. No such parallelism exists, and the two reasons are often in conflict.

Passing 2 and 3 for later and fuller consideration, we take up 4 and 5, which appeal to social and personal grounds of distinction, not to economic and impersonal ones. Here is again a confusion of the political or legal question of ownership with the real economic question, the function performed or contribution made by material agents. This difference, moreover, in the social position of landlord and capitalist, so emphasized, can be shown to rest on accidental historical grounds which we cannot now discuss. Again, the emphasis of this difference is largely due to the misleading terminology which is under

* Commons, *Distribution of Wealth*, p. 29. † Marshall, 2d ed., p 198.

discussion. And, finally, I would contest the statement that property in land and "movables" is justified on essentially different grounds. They must be, and are by most political theorists of to-day, justified on exactly the same ground.

In 6 and 7 appeal is made to differences in economic nature. In reason 6 there is again the fallacy of thinking of land as a field used for agriculture. It must be said, first, that land, in the sense of the word under discussion,—*i.e.*, natural agents,— is an indispensable agent of the milling industry, carpentry, and every other art, as well as of agriculture. To call land the "special" agent of agriculture because that part of land which consists of fertile soil is necessary for plant life is to make a very crude distinction, based on no logical principle. At most a difference of degree only is involved, in that a larger area is usually needed to produce a given value of food than is needed to produce that value of other things; but the reverse is frequently true. Secondly, it may be said that "the important peculiarities" (the chief of which no doubt is thought of as the law of diminishing returns) here attributed to agriculture are in no way peculiar to it. The belief that they are rests largely on the basis of a false terminology. As to 7, likewise, we have a begging of the question; for the differences in our ways of regarding interest and rent are primarily due to the terminology whose correctness is under discussion. Finally, it must be noted that, when Böhm-Bawerk comes to explain interest from durable goods,* he refutes the statement that income from land differs in many ways from income from capital, and, "obeys many distinct laws of its own." † He then finds that the two incomes "have one common final cause." ‡ "Land rent is nothing but a special case of interest obtained from durable goods." §

* *Positive Theory*, pp. 339–357. † Ibid., p. 55. ‡ Ibid., p. 357.

§ Ibid., p. 355. The explanation given by Böhm-Bawerk is open to serious criticism.

In 8, 9, and 10 the appeal is to usage which is shifting, and by no means uniform in the direction Böhm-Bawerk assumes. As to 8, the reply is that it will be an advantage not to designate by special names the group mentioned if it is shown, as will be done later, that such a group should not, either for logical or practical purposes, be marked off from the other parts of capital. Indeed, it is one of the most important advantages of a different terminology that it gets rid of the figment in question. Reasons 9 and 10 contain doubtful statements. Popular usage and economists, even those who favor Böhm-Bawerk's terminology, in many cases class land under capital, speaking of the investment of capital in land, and reckoning the land with the man's capital thereafter. So, when a loan is made in money, we are always told that the thing really borrowed is what the money buys: if machines, then it is really these for which interest is paid; if a farm, then it is this for which interest is paid. The moment you give the money aspect to the loan, no attempt is made to distinguish between the income from land and the income from other material agents.

I have left to the last reasons 2 and 3, which, stated together, read that land is a gift of nature and cannot be increased, while capital is a result of labor and can be increased. This thought is the central one in the distinction: it is the parent of all the other reasons; and we here trace to their source the errors just considered. The trail of the serpent, the mark of the labor theory of value, is over the whole treatment of capital as the product of former labor. Böhm-Bawerk does not escape it. He has indeed given a most able refutation of that theory,* and takes frequent opportunities to stamp it with his disapproval. In his later volume he says that the phrase "stock of accumulated labor" is a metaphor,† and, again,

* *Capital and Interest*, *passim*, but particularly pp. 237-387.

† *Positive Theory*, p. 33.

that it is employing a mere "figure of speech" to speak of capital as "previous labor" or "stored-up labor." * In refuting socialist views, he has shown that capital "is not exclusively 'previous labor'" †; but he is not free from his own criticism when he adds: "but it is partly and, indeed, as a rule, it is principally, 'previous labor'; for the rest, it is valuable natural power stored up for human purposes." ‡ Later he again makes greater limitations on the proposition, and says: "The asserted 'law,' that the value of goods is regulated by the amount of the labor incorporated in them, does not hold at all in the case of a very considerable proportion of goods; in the case of the others, does not hold always, and never holds exactly. These are the facts of experience with which the value theorists have to reckon." § In these statements we have the view that the value of capital is not in proportion to previous labor, and that capital owes its value partly to scarce and valuable natural powers. The same idea appears elsewhere. "Capital — to keep the same form of expression — is 'stored-up labor,' but it is something more: it is also stored-up valuable natural power." ‖ The part attributed to natural powers reaches at times the vanishing-point as Böhm-Bawerk shows; ¶ but he does not draw the obvious inference that the part of labor reaches at times the vanishing-point, and that many products, many things classed by him as capital, are exclusively "stored-up" natural powers. Why continue to apply the phrase "products of labor" more than "products of nature" to those things which owe to labor proportions of their value varying from all to nothing? Where there is no labor, would Böhm-Bawerk cease to call the thing capital? Certainly not, must be the answer, if that is the only difference. To take his own illustration, used against Rodbertus for another purpose: "If a lump of solid gold

* *Positive Theory*, p. 53.
† *Capital and Interest*, p. 341.
‡ Ibid., p. 341.
§ Ibid., p. 387.
‖ *Positive Theory*, p. 99.
¶ *Capital and Interest*, p. 341.

in the shape of a meteoric stone falls on a man's field,"* will it not be capital as much as any other piece of gold? According to proposition 2, which we are criticising, it would not be capital, but land, being a "gift of nature."

In truth, Böhm-Bawerk does not concern himself about any such difficulties, but speaks literally of capital in the very phrase he has called a metaphor. He says, "The next stage of the controversy brings us to the question whether we are to give the name of capital only to the *products of labor* that serve for acquisition, the 'previous stored-up labor,' or are to include land." † Again, he approves the same usage when he says, "Mill has so far yielded to the pressure of facts as to admit that capital is itself the product of labor, and that its instrumentality in production is, therefore, in reality, that of labor in an indirect shape." ‡ It seems to Böhm-Bawerk self-evident that capital is produced. "Every child knows that a piece of capital, say a hammer, must be produced if it is to come into existence." § Now there might be some uncertainty, taking the sentence alone, as to just what is meant here by "produced"; but the context shows that this means just what the last-quoted sentence does, that capital is produced by labor. In the discussion of the roundabout method of production he consciously omits ‖ from the productive powers the uses of land "for the sake of simplification," and assumes that the annual endowment of powers consists only of "labor years." There is the danger in this omission that it may accustom the author and his readers to the thought that capital indeed consists of stored-up labor alone. In fact, most products are due to the use of both sources of production; but supposing he had omitted "for the sake of simplification" the labor years, and had assumed that the productive powers of land alone produced all goods. Such cases, in

* *Capital and Interest*, p. 338.

† *Positive Theory*, p. 55.

‡ Ibid., p. 98.

§ Ibid., p. 117.

‖ *E.g.*, Ibid., pp. 89 and 106.

fact, occur where a fixed flow of goods from natural agents has an annual value without the aid of man. Yet it probably never would have occurred to Böhm-Bawerk to speak of such goods as products if, as is usually the case, they were not fully fitted for consumption, hence were intermediate goods. I have looked in vain not only in his writings, but through economic literature, for an admission that capital may be a "product" of unassisted nature as fully as it can be the product of labor. Yet there seems no valid reason why that view should not be held, the only reason why it is not being that the labor theory of value still influences the thoughts and utterances of men.

Our immediate study, let us recall, is the validity of a distinction between capital and land, on the ground that the one is and the other is not the product of labor. We have just seen the difficulty of applying it in the case of capital. We must now note that Böhm-Bawerk gives up the attempt to apply it strictly to land. He says that improvements on land, so far as they are completely incorporated with it, "are to be kept separate from capital *for the same reasons* * which made us keep land itself separate from capital." † Evidently, the author deceives himself. He has forgotten one of the most important reasons for the distinction, the one we are discussing; namely, that capital is the result of labor, and land is not. In this case he is classing the improvements with land, not because, but in spite of the fact that they are the results of labor. He sees the difficulty, and in a note says: "I may be accused of want of logic here on the ground that such improvements are always products which serve towards further production, and therefore come under our definition of capital." ‡ But he argues, "The criticism is correct as to the letter, but wrong as to the spirit." What can the spirit of the distinction be that is

* The Italics are my own. † *Positive Theory*, p. 65. ‡ Ibid., p. 65.

so opposed to the words of the definition? We get this answer: "A stay propped up against a tree is certainly not the tree itself, but an outside body. But who would still call it an outside body if after some years it had grown inseparable from the tree?" * So far as this has any application at all, it disproves what the author wishes to support; for we should not call a stick around which the tree had grown a part of the tree. The tree has the unity of life and organization, and the stay is no part of it. The essential thing for us, however, is that here also is a set of cases in which Böhm-Bawerk finds it practically impossible to make the distinction between capital and land depend on whether their source is in labor. Though the source of their value is in labor, some things are to be classed with natural agents because they are physically inseparable from natural agents. May we not ask why, if the labor is incorporated in the land, does not the land become capital? In some cases a touch of labor is all that is needed to "produce" goods of large value from natural materials, which are then called capital. Why call a combination of natural agents and labor land at one time and capital at another? A satisfactory reason, if there be one, has never yet been given.

To sum up the objections to the attempt to make the distinction between land and capital rest on the absence or presence of labor:—

1. Some capital, things treated as such by Böhm-Bawerk and others, is not the result of labor at all,—for example, the meteoric lump of gold, the annual crop of fruits on an untilled field, the yield of a mineral spring.

2. It is not logical to call capital a result or product of labor, any more than to call it a result or product of land. Nearly all capital owes in part its economic existence to labor; but its value is not measured by the "amount of labor," whatever that may mean, any more than it is

* *Positive Theory*, p. 65.

measured by the amount of uses of land. In fact, we have no way of expressing the amount of labor or of uses of land, except through their value.

3. If the mere presence of labor in producing the present values is what is meant by "production," then, practically, all land must be classed as capital; for there is little of it that has not had its value enhanced by labor applied to it.

4. The attempt to distinguish between the part of the value of a material thing that is due to labor and the part that is due to nature, keeping thus nature (or land) and capital distinct, is vain when once the labor has been spent. This is recognized by Böhm-Bawerk in certain cases, like permanent improvements on agricultural fields; but this case differs in no essential from every other case where scarce natural materials are united with labor. It is purely arbitrary to call some such combinations land, and others capital.

5. Finally, it is not true that land, as understood by the business man or the economist when he really comes to his problem, consists only of the gifts of nature. Large areas are made and reclaimed, and then are treated precisely the same way as the land that exists little changed since coming from nature's hand.

The reasons are so many and conclusive against this distinction that only the influence of the labor theory of value over those who think themselves emancipated from it can explain the persistence of the error. Yet this distinction is of the essence of Böhm-Bawerk's concept of capital. A consistent capital concept never can be based upon it.

## VI. A Restatement of the Capital Concept.

We have seen * that Böhm-Bawerk holds the view that capital should be taken to consist of concrete goods, and that he opposes strongly any attempt to make "some kind of abstraction the essence of capital." † He does not think that capital should be spoken of as a "sum of value" or as "circulating power" or as "purchasing power." ‡ He believes that capital consists of "the common material goods called mills, looms, ploughs, locomotives." It is these, and not "an immaterial sum of value," which "can grind corn, or spin yarn, or plough up land, or carry a load." § We have seen that the attack of Clark on the work of Böhm-Bawerk assumes that the concrete conception is the one that Böhm-Bawerk makes use of, and that it is a false one. Our criticism of Böhm-Bawerk's treatment is on a different line; namely, that he has not one, but two concepts of capital,‖ and that, while defining capital as if it could be spoken of without reference to value or the use of value expressions, he employs a value concept almost entirely in his reasoning on the interest problem. He makes a shift without being conscious of it, and makes use of the concept which Clark criticises him for ignoring.

In the concept of capital must be united both the thought of concrete things and that of their value, for their quantity is only measurable in a way that permits of comparison in terms of value. There is nothing metaphysical or abstract about this: it is what business men are doing constantly. They do not attempt to compare amounts of capital by physical standards of measurement. Things which lose their value are no longer counted as

* See *supra.*, p. 6. † *Positive Theory*, pp. 33, 34. ‡ Ibid., pp. 58, 59.

§ See other definitions of capital as concrete in *Positive Theory*, pp. 22, 65, and *passim*.

‖ One of which differs both from the social and the private capital; three, therefore, including both of them.

capital, no matter how large their amount. A change in the quality involving a change in value or in value of a given quality is at once counted as a change in the quantity of capital. And the idea of capital is carried over to all things of value, regardless of the question of the origin of the good. Böhm-Bawerk illustrates this usage frequently, for example, when he speaks of the "capital value of land," * and, again, in making use of the word "capitalization" in explaining the value of land and interest arising from it.†

The business man, followed by the economist when he comes to discuss practical problems, starts with the thought of a man with a sum of money to spend for buying goods; and this buying is called "investing" his capital, or, as the word originally meant "clothing," the money in the form of other material things. When the money is thus "invested," it may be in the form of machines, buildings, lands, products on which labor has been employed. If the investment has been fortunate, we say, comparing the values with the value of the money expended, that the capital has increased. Now there is of course some danger of confusing capital with money, but no more than in every case where money is used to express the value of other goods. What is the capital? Either the money or the thing whose value is expressed in money. Money is itself a concrete thing, one in which the value of other things is expressed. It is this expression and measurement of market value which is the essence of the capital concept in much business usage, as well as in most economic discussion, no matter what may be the formal definition. This must be recognized in our definition.

Capital, in our conception, is an aspect of material things, or, better, it consists of material things considered in one aspect,— their market value. It is under this aspect

* *Positive Theory*, p. 344. † Ibid., p. 348.

that men have come more and more to look at wealth. The growth of a money-economy has made it more and more convenient to compare and measure the value of dissimilar things in terms of dollars. Things are thus capitalized. A writer, tracing the development of the wealth concept, has well pointed out that at one time wealth was looked upon as consisting of things of use to the owner, lands, flocks, herds,— use-values, to use the old phrase,— but that now it is looked upon as made up of things having exchange value, estimated in terms of the general standard of value in the community.* He would confine the term "wealth" to this latter concept, leaving the former without any special name; while the proposal here is to confine the term "wealth" to the former concept, and apply to the latter the term "capital." We thus adhere as closely as possible to popular usage. We should thus speak of a man's wealth as consisting of a number of acres of land, a herd of horses or cattle, a number of machines or ships; but we should say that his capital consisted of so many thousand dollars' worth of land, cattle, and the like. We say that a company has a capital of so many thousand dollars, and it is invested in buildings and machinery. The distinction between nominal capital and paid-up capital, and that between the capital stock consisting of paper certificates or shares and the capital of valuable material things, present no serious difficulties. Wealth and capital consist of precisely the same things. Wealth is the popular expression for goods the exact valuation of which is not stated. Capital is merely the ordinary market value expression of wealth. As we cannot give to the value of anything an arithmetical expression except in terms of some other concrete thing, we find it most convenient to express it in terms of money. The increase or decrease of capital is not measured by any ultimate standard. The changes in its money expression do

*Charles A. Tuttle, in *Annals of the American Academy of Political and Social Science*, i. 615, ff.

not necessarily reflect changes in the welfare of the community or of the individual. Over periods of time, changes in the quantity of capital can only be determined in a conventional way, by men's agreeing to accept one commodity or group of commodities as a standard. But at any moment the different portions of capital are homogeneous, and can be compared, added, or subtracted as we see men doing every day in business.

The term "property," again, is loosely used in place of wealth or capital, but can be clearly distinguished from them as the legal, not the economic, aspect of valuable material things. In short, "property" has as its essence the idea of legal right; and in connection with material things the important right is that of control. Ownership is simply a greater or less degree of control. The term "property," meaning legal rights of control, is broader; that is, extends to more things than the terms "wealth" or "capital," for it includes patent rights, legal monopolies, valuable agreements from men to do or not to do certain things, all having the common feature that the value is not attached to or connected with or attributed to a material thing, but is due to the legal right to control or limit some person's action. It seems inadvisable to try to make the content of wealth as large as that of property by considering that men become wealth to the degree that their rights are limited in the interest of others.* To illustrate the use of the terms "wealth," "capital," and "property," we would say that a stock of goods is wealth, it is (or it represents) a capital of $10,000, and it is the property of Jones, and the property is worth $10,000. If Brown holds a mortgage of $5,000 on the property, however the lawyers may look at it, we must consider that Jones's property (or right) is only of the value of $5,000. The property of Brown and that of Jones are both found within the capital of $10,000, and in total value cannot

* Such a view is taken by Irving Fisher, *Economic Journal*, vii. 206.

exceed it. The value of the property owned never can exceed the capital that is the object of the legal right. Many absurdities in our laws of taxation have resulted from confusing the economic view of wealth with the legal question of ownership, and of confusing, still less excusably the mere paper evidences of legal rights with the wealth to which those rights apply.

To restate the definition that has here been arrived at: *Capital is economic wealth whose quantity is expressed in a general value unit.* It is used as applying to a single thing or to a group of things. There is no place in it for the distinction, the inconsistencies of which have been discussed, between individual and social capital. We do not call the services of things that minister directly to satisfaction unproductive while calling the personal services of men productive, even where nothing material results. We do not retain the distinction between consumption and production goods as essential in economic discussion. All valuable things of more than momentary duration are "intermediate goods," are capital, in that they are valuable because designed to satisfy future wants. While the definition thus sweeps away any limitation on the content of capital because of a difference in future use, it likewise sweeps away any limitation because of a difference in the origin or source of its value. Capital is not thought of as made up only of goods whose value is the result of labor. It has been shown that the prevailing distinction between "natural agents" and "produced agents" of production involves radical defects of logic and is practically not maintained. This definition is emancipated from the false labor theory of value. In regard to the contending views,— first, that capital consists of concrete goods, and, second, that it is the value of goods,— the definition harmonizes them by defining capital as consisting of the concrete things, but only when considered as homogeneous and comparable units of value.

I would not exaggerate the significance of the change here proposed in the capital concept, yet it would be folly to ignore the consequences its acceptance would involve for economic theory. Text-books must be rewritten, and many questions must be re-examined. This is not because the concept is unused by the older writers, but because they have used it without recognizing how different it was from their formal definitions and the concept employed in other parts of their work. Many students of recent years have felt the need of a readjustment of the leading economic concepts. This concept requires and makes possible such a readjustment. The current theories of land value, of rent, of interest, to a greater or less extent rest on the unsound ideas which have been criticised throughout this paper. On another occasion the writer will attempt to state the outlines of an economic system of thought in harmony with the capital concept here presented.

FRANK A. FETTER.

STANFORD UNIVERSITY.

# THE TRUSTS: FACTS ESTABLISHED AND PROBLEMS UNSOLVED.

THE trusts have been prominent in political and economic discussion in the United States for nearly twenty years. There have been several official investigations of the subject by the national government and the different state governments; the government of Canada has investigated it; a brief report on the situation in Austria has been made by a committee of that government. Besides these official investigations, many studies have been made by private individuals connected with industrial combinations, by those opposed to them and also by impartial investigators, both here and abroad. Every one who has given careful attention to the subject is aware that, owing to its complexity, and to the fact that the situation has been continually changing, it is impossible to express a final opinion on many matters connected with it. The time has come, however, when it may be profitable to sum up as compactly as possible what has been actually established, and to point out where further experience is needed. In this article, therefore, an attempt is made to distinguish, as carefully as possible, between what may be considered as established regarding these combinations and what problems can be solved only after further experience or more careful investigation; and, in the light of this summary, to indicate briefly what seems to be the situation regarding advantageous legislation. Railroads and other natural monopolies will be excluded from the discussion, which is confined to the so-called capitalistic monopolies.

The final cause of these combinations, all will probably agree, is to be found in the main in the desire of business

men to increase their profits. Doubtless, connected with this chief motive, others are to be found, such as the desire to exert greater power and influence in the community. The main cause, however, and the obvious one, states only a truism, unless one designates with some care the means by which profits are to be increased through combination.

In very many cases,—probably in the large majority of cases,—competition among rival manufacturers has reduced profits very materially before a combination has been effected; and the thought uppermost in the minds of those entering into the combination has been to check or to set aside entirely this very severe competition. In prospectuses and public discussions the savings that may be effected by combinations are often made most prominent; but, in private conversation, persons who have entered into them will usually concede that the chief purpose has been to check competition which they consider excessive, even when the thought of monopoly is not present. Experience shows that competition has frequently been, for considerable periods of time, very materially lessened, so much so that the expressions "temporary monopoly," "partial monopoly," etc., seem fully justified. It is also clear that industries which require a large investment in fixed capital, and the products of which are uniform in nature or can be readily tested, are more easily controlled by combinations than are others; but so far the experience has been short, and not entirely conclusive.

There can be no doubt, too, that in many instances the hope not merely of lessening competition, but of securing a monopoly of the market, has been a prominent influence in bringing together into a combination competing establishments. Where the form of organization is that merely of dividing markets and agreeing upon prices, as is common in Europe, the combination is usually not made until the producers of 95 per cent. or more of the entire

output are ready to join the agreement. So, also, in our own country it has often been true that the trusts are able to control considerably more than 90 per cent. of the market, thus giving them such power that their prices are fixed, to a considerable extent at least, on the basis of the greatest net returns rather than upon the cost of production. While the hope of monopoly has thus been a prominent element in securing the formation of these combinations, it is also certain that for a comparatively short time, at any rate, monopoly has been secured. It remains yet to be shown by experience whether this monopoly can be held permanently or for very long periods of time. It remains also to be shown, provided monopoly can be held permanently in any lines of industry, just what those lines of industry are, and in what other lines monopoly is impossible. The conditions of business in various industries differ so materially that — while it is perhaps to be considered established that, even without natural monopoly or special favors granted, permanent monopoly can be secured simply through the influence of great capital in some lines of industry — it is equally certain that the field within which such monopoly can be established without outside aid is comparatively limited. It is of the greatest importance in connection with legislation as well as in connection with a scientific understanding of the whole industrial situation that this line of demarcation between the various classes of industry be accurately drawn, and that the relation of each to the question of combination be carefully considered. Only long experience and careful observation can enable any one fitly to perform the task.

Organizers of the combinations generally believe that through combination important savings in the cost of manufacture can be effected; and the experience of the past ten years makes it certain that such savings have been in very many cases really made.

When freight charges form a considerable part of the cost of putting the goods into the hands of consumers, material savings are made by combinations which control manufacturing establishments in different sections of the country through the avoidance of cross freights. These savings are often very large, running sometimes into the hundreds of thousands of dollars a year; but they are by no means made by all combinations. They cannot be effected for an industry which, from its nature, is practically limited to some one locality; and the freight is a matter of slight moment in many other industries of which the manufactured articles are of light weight.

The cost of selling is often very materially lessened by combination. In those instances in which competitors have kept travelling salesmen on the road, visiting the same localities and the same customers, very large savings are made by reducing the number of such salesmen, permitting one to take orders for the different manufacturing establishments which make the same kinds of goods, and to take orders also for a greater variety of goods than was customary before the combination was effected. What applies to travelling salesmen applies, also, in many cases, to local merchants who sell on commission or in other ways act as distributors of the manufactured product. Their number and the amount of their commissions have frequently been reduced.

A similar saving has been made in lessening the amount expended for advertising purposes, or perhaps more frequently in making more efficient an advertising expenditure which has not been lessened in amount. We may distinguish three kinds of advertising: one, which simply announces to the public where goods of certain qualities likely to be in demand can be secured and under what conditions; a second, which calls the attention of the public to goods regarding which people would have little knowledge without the advertisement; and a third,

which attempts to persuade customers to buy the goods advertised instead of some other which might satisfy the same want. Advertising of the third class is peculiarly competitive advertising, and in many cases serves the purpose merely of transferring orders from one establishment to another without increasing the total amount consumed. The formation of a combination enables the money which has been expended in the third class of advertising to be more profitably used in that of the first and second classes. But these savings in the cost of selling, though usually prominently mentioned and frequently made, are by no means universally made by combinations.

A small establishment is often compelled to throw away material which, under other circumstances, can be made into a valuable by-product. Sometimes the saving can be effected only when the amount of material that can be so used is large, sometimes only by the expenditure of larger sums of money than are at the disposal of the small establishment. In either case, however, a decided advantage is given to a large concern which can readily be created by the combination of several independent establishments. The extent to which this advantage is secured by industrial combination is not fully known, and will vary, of course, with each separate industry. This source of saving is practically nothing in some lines. In other lines the by-product that can thus be saved and improved, as in the petroleum industry, may perhaps prove a source of profit as important as the main product.

The chief benefit which comes to society from the invention of new machinery is the saving of energy thereby effected, which lessens the cost of production. A somewhat similar saving of energy comes from the organization of a large business under a single skilled executive head. A much more efficient division of labor can often be made

than was possible before, and in this way energy is saved. The president of the American Steel Hoop Company testified that, under that company, through the better organization of work of different classes into separate mills, it was possible to avoid changing rollers, stopping machinery, and the like, to so great an extent that, as compared with the work in separate establishments, saving to the amount of one dollar per ton in the cost of manufacture was effected. In very many lines of industry where there is a large variety of products, by the better organization of the work into different establishments under one management, similar savings could be effected. On the other hand, saving of this kind cannot be made in all lines of industry; and it remains yet to be shown to what an extent this source of saving can be made available through combination.

The added efficiency that comes from the better organization of labor and through the better grouping of machines is secured, also, through the better grouping of administrative and business talent in very large establishments. In small establishments one man with a special gift for a certain kind of business is compelled to do many kinds of work. If several such men, each with his peculiar gift, come together into a large establishment, each one can devote his whole time to that department for which he is specially fitted. Experience is already long enough to show that this is often a decided advantage to large combinations. On the other hand, it has not yet been shown that this efficient grouping of industrial talent, though it often takes place when a new combination is formed, is one that will remain permanent through the changing vicissitudes of business. It is quite possible that, as the history of industrial combinations progresses, we shall find that in these larger combinations — as is often true in governmental offices, and, at times, even in large railways and banks with a long

history — habits of doing business will become fixed, a tendency towards hereditary office-holding will develop, the men of special gifts will not be grouped to the best advantage, and we shall have the evils so often found in old countries in long-established private firms reproduced in an exaggerated degree in long-established combinations. It is probably true that as yet no such tendency has appeared; but this element of advantage so often cited by the managers of combinations cannot for many years to come be looked upon as proved.

This same truth holds to a considerable extent with reference to the quality of mind found in the managers of the greatest industrial combinations. It is probably true that in the beginning the strongest men are placed at the head. Experience alone will be able to show us whether the pressure from potential competition or the demands of stockholders for regular profits, or other forces, will be found sufficient to keep permanently the quality of managers up to the same high standard, or whether, under the influence of the feeling of security regarding reasonable profits and of methods which become fixed, these positions may not come eventually to be held too long in the same hands. Possibly they will be bestowed at times from motives of favoritism upon individuals who, perhaps, will make no serious mistake, but who, nevertheless, will not possess the extraordinary business ability shown by many of the founders. In practically all kinds of social activity this tendency towards formalism, towards habits so steady that enterprise is choked, is plainly marked. Under the competitive system the victims of such habits are comparatively soon thrown out of the industrial field. In government bureaus and in large establishments which are for different reasons freed from the pressure of competition, they often hold their positions. If our large capitalistic combinations succeed in freeing themselves, even to a considerable extent, from the pressure of competition,

will this tendency lower efficiency as much as the saving from better division of labor tends to increase it? It may be set down as an established fact that now we have real captains of industry in very many cases, if not in most cases, at the heads of the great combinations. It remains yet to be established by experience whether such captains of industry will be found generally at their head, after time enough has elapsed for society and business men themselves to become accustomed to the new methods of doing business. It is perhaps not too much to say that, so far as economic efficiency is concerned, this is the crucial test. The personal element is, in the long run, probably the most powerful single one. The fact that to a considerable extent competition in efficiency exists among the different establishments in the same combination, and that each superintendent can be tested by direct comparison of the results of his work with those of other establishments, tends to strengthen the combination. We cannot yet say positively whether or not the form of organization of combinations will always make this possible, nor whether this force of competition within the organization will ultimately be enough to overcome the tendency towards apathy so generally found in all old social institutions.

Men who have been prominent in the organization of trusts, both in this country and in Europe, do not hesitate to say that a prominent motive in their formation has at times been the hope on the part of the managers that they could thereby secure greater power over their laborers. This has been especially true where employers have been frequently threatened with strikes or have seen their profits melt away through the hostile acts of trade unions. Such avowals are comparatively seldom made in public; and it is probable that such a motive alone would never be sufficient to bring about the organization of a great combination, but that it is a contributing element at times is certain. How great this added power over the

laborers is that is thus secured from combination is by no means yet determined, though at times it is probably considerable. Still less certain is it that in the long run the power of the combinations will be great enough to benefit employers at all at the expense of the employees.

While this desire to secure more complete control over the laborers has at times contributed to the formation of combinations, it is also equally true that the desire to make labor more efficient, so that fair or even high wages could be paid to the laborers without destroying entirely the profits of the employers, has also been an element in their organization. In certain cases in the United States this motive has been distinctly given in the articles of association, and the principles by which added profits were to be divided in part with the employees have been stated. In England, as is well known, the Brass Bedstead Combination and others which have been brought together through the influence of Mr. E. J. Smith have organized on the basis of a combination which should include workingmen as well as employers, and should so divide the added profits that might come through increased prices to consumers as to secure for the employers fair profits and for the employees a commensurate increase in wages. It remains still to be shown, however, through longer experience, whether the self-control of the laborers and the mutual confidence between them and their employers can be permanently secured, so that the consumer can be compelled permanently to pay prices considerably above competitive rates for the sake of the two factors in production,— labor and capital. This does not raise the question, of course, as to whether any benefit whatever would come to all employees and all employers, provided this system of combination were to become universally applied in all lines of industry. It is perhaps sufficient to say that such combinations are — at any rate, within the present era — not universally found. They are even, for

the present, impossible in very many lines of industry. It has been possible for certain industries to secure for a time these advantages to themselves at the expense of others in the community. The extent to which this can be done is something that requires much greater experience to determine.

It is beyond question true that in individual cases certain special favors, adventitious aids, have built up the power of single corporations or of combinations of capital until they have become practical monopolies. Special discriminating rates granted by railroads, special legislation granting such privileges as exclusive franchises, special protective tariff rates, have all doubtless had this result. On the other hand, it has not by any means as yet been settled just where the limit of the influence of these special favors on the upbuilding of combinations is to be fixed. It is clear that in different countries exceedingly powerful combinations have been effected, apparently without any of these special favors.

Patents which give a legal monopoly, of course, are intended to encourage monopoly for the time being, and need no further discussion.

In Europe, railway discriminations among individual shippers are practically unknown. Under general rules somewhat lower rates are given at times to very large shippers; but in these cases the rate is an open one, and is not in the nature of a special discrimination. In other instances special rates have been made to develop a certain industry. In that case, however, all shippers of the product over the same route receive like treatment. In all probability it sometimes happens that these special rates do act as discriminations; but this is rarely true, and there is nothing secret about it, so that the public is enabled at all times to judge exactly the situation. In the United States, it is certain, freight discriminations have

aided large shippers, including certain so-called trusts. It seems equally certain that others have grown up without such favors.

The situation regarding the tariff is somewhat more complicated. It is probably not exact to say in any case that a protective tariff is the cause of a combination. On the other hand, it is doubtless true that a tariff has at times, perhaps often, in our country as well as abroad, furnished a favorable occasion for the organization of a combination to lessen competition or to secure a monopoly in the home country without fear of competition from abroad. The combinations, by doing away with home competition, have been enabled to make the use of the tariff, so far as foreign competitors are concerned, that was intended by the government when it was levied; and the price of the product is doubtless sometimes, though by no means always, substantially determined by the price of the chief foreign competitor, with the tariff and freight added. It can of course be considered as established that, if a combination has succeeded in doing away almost entirely with home competition, it can, if the product is one that would be affected by foreign competition without the tariff, put the price higher than would be otherwise possible. The removal of the tariff would, under those circumstances, beyond question lower the price, though it might possibly destroy the industry in so doing. The question that is still to be settled in connection with the tariff and trusts is this: To what extent does the home government think it wise in each individual case to protect an industry that is substantially monopolized by a combination? It will be noted that the study must be made independently for each separate industry. It may possibly be a question of the total abolition of the tariff and the compulsion of the combination to compete directly with foreigners on equal terms. It may be a question of the lowering of the tariff, so as to hold the price made by

the combination within normal or low limits without the destruction of the industry. Or, again, the question in certain cases may fairly be whether the government does not think it wise to keep the tariff and uphold an industry even at the expense of the consumers rather than to let it be driven out entirely by foreign competition, thus compelling the capital invested and the workmen employed in it to seek occupation elsewhere.

It is beyond question true that, by virtue of the greater power given through the possession of large capital and a very large organization, such as in most cases can be made under present industrial conditions only through the combination of several independent establishments, the export trade can be developed better than by small individual establishments. The advantage comes in two ways. In the first place, the combination often secures, through partial or total abolition of competition, a profitable business at home, with a secure market in the home country. With this profit assured, the combination can afford temporarily to lower prices enough to force its way into foreign markets, when, if it had to fight with equal vigor for its home market, it would be impossible to do so. In the second place, even without any increase in price in the home market, the added capital at the disposition of the combination may enable it to send more highly paid agents and to lower its prices more than would otherwise be the case, in order to secure the foreign market. In both these ways, beyond question, the great combinations in both the United States and the leading European countries have been enabled to extend their markets along certain lines more rapidly than would otherwise have been the case. It is a common experience to hear managers of combinations assert that without their combinations it would be impossible for them to meet the competition of other countries. The great capital of one country can be

met only, in their judgment, by correspondingly great capital and added power in the other country. They believe that in very many cases the control of the markets in countries that are not important manufacturing countries themselves will go to the country that puts the greatest capital and skill into the development of the export trade, and they think that this depends largely upon the formation of great industrial combinations. Further experience will enable us to determine much more definitely than is now possible in what lines and to how great an extent this is true; and also whether or not this trade is at times secured at too great a cost.

It is comparatively easy to see the advantage which comes to industry through the activities of the promoter, if by the promoter is meant a man who takes charge of the details of organization of a great business and places the stock upon the market when industrial conditions are such that the corporation comes naturally into existence, or when a man does the detailed work for several others who have already, through the exigencies of business, found it desirable to combine their separate interests into one. In the formation of such a combination, it is, of course, necessary that some one take the lead in determining the parts that each one of the different members ought to have in the new organization, in preventing misunderstandings, and in settling such other difficulties as in the organization of such a combination are sure to arise. The work of such a man is a necessity, and is of clear benefit to the community. Whether called promoter or by some other name, he should be well paid for his services. Often a man of such exceptional tact and good judgment — one who has had the confidence of the business community for a long period of time — has demanded that his reward should not be proportionate to the length of time devoted to the work, but should rather

be estimated somewhat in proportion to the importance of the service rendered. And this demand is just.

Promoters, however, often do other work that is of much less importance to society; and in the organization of many of the later industrial combinations in the United States their services, instead of being an industrial benefit, have been a most serious damage.

To illustrate from an analogous field: A new invention, which may or may not prove of advantage to the industrial community, can be exploited only by means of a corporation, in which, on account of the risk involved, each investor is willing to risk only a certain determined amount. For the exploitation of such an invention, some hopeful promoter is necessary. If the invention proves to be one adapted to the public needs, the promoter has performed a genuine service to the community, and may well be rewarded accordingly. If the invention, on the other hand, proves to be worthless, while no one is particularly to blame, the community has simply been injured by the waste of energy and capital involved in attempting to exploit a worthless thing. The promoter works in such cases, of course, with the hope of the great reward that may come, provided the invention proves a success, and with the expectation of some loss, perhaps, if it proves a failure. In many instances, however, the promoter's aim is a much more directly selfish one. He may determine to exploit the invention so far as the formation of the company and the placing of its shares upon the market are concerned, with the expectation that his profits will be derived from the shares sold, and that he will reap his reward, whether the public be gainer or loser. In many cases, even when his belief is strong that the public will be the loser in the long run, he acts no less vigorously; and his work is done when the shares are sold.

In the organization of industrial combinations we find the promoter occupying somewhat similar positions. If

the combination is one naturally called into existence by industrial conditions,— one which, on the whole, will prove beneficial, not merely to the members of the combination, but also to the public, on account of the better direction of productive energy,— the promoter has rendered the public a service, and should be rewarded accordingly. In the organization of some of our trusts the promoter has performed this useful work, and has earned his reward. On the other hand, in very many cases, it is certain that the situation of business did not call for the organization of a combination at the time that it has been called into existence, but that the promoter, through his skill in representation, or misrepresentation, has persuaded independent producers that they could, with less risk, reap large profits, and has in that way unwisely called into existence one of these combinations. The result has been simply injury to the independent producers and injury to the public. If the promoter has succeeded in disposing of the shares which he has taken in the new organization, he has reaped his reward at the expense of his associates and of the public.

Even where the organization has been one that might be justified in some form by industrial conditions, and while to that extent, at any rate, the promoter may be said to have performed a public service, the method of organization may have been so faulty that the public are injured. It is probably not too much to say that in the great majority of the industrial combinations which have been brought together within the last three years in the United States there has been a great amount of over-capitalization. This over-capitalization has, also, in many cases, resulted to the detriment of the public, both because it has stimulated the desire to extort too high profits from the public by insistence upon higher than normal prices, and because, through more or less intentional deception, the investors have been persuaded to pay

prices for the stock higher than business conditions could in the long run justify. Still further, through the stimulation of speculation and unsound methods of doing business, the industrial community as a whole has been greatly injured. It is established, then, that in the organization of these combinations the promoter has at times done work that is beneficial to the community. Frequently he has done work that was at least unnecessary and probably somewhat detrimental to the community; and in very many other cases, through the encouragement of over-capitalization and the speculative tendency in the community, his doings have been a positive injury.

To a certain extent the same conclusions have been reached regarding banks that have been active in forming these combinations and placing their securities as regarding the promoter. Much less, however, is known about the real work of the banks and bank officials; and this is a subject which much needs further investigation.

Many business men deprecate any attempt to put restrictions upon the organization of corporations or on other forms of business organization, on the plea that such restrictions will hamper enterprise. Their attitude is in part just, but in part, also, short-sighted. The encouragement of a sound business which will in all probability make reasonable profits for those investing in it, and which will satisfy real needs of the community, is desirable. The encouragement of an enterprise, however, which results in over-speculation and in the benefit of the promoter or of a few shrewd speculators at the expense of the rest of the community, is clearly detrimental. Legislators, and many who are disposed to give advice on legislation, are altogether too likely to confound these two kinds of enterprise. One of the most important matters which remains still to be determined in connection with the development of the large industrial combinations is the extent to which mere speculative enterprise, on the one hand, and

speculative methods in the development of sound business combinations, on the other hand, have been carried on; and how far and by what methods combinations can be formed which will be in accordance with normal business conditions, and which are likely to result only in benefits to the public.

A similar condition of affairs exists with reference to the conduct of the large combinations after their formation. Some of them beyond question are conducted conservatively and wisely in the interests of the stockholders and probably of the public also. Others are so organized and managed that a few directors or managers who are more or less unscrupulous in their methods of seeking personal profit gather to themselves large gains at the expense of the stockholders, on the one hand, and of the public, on the other. There is here a great field still left for investigation in the United States. The field is one which is not limited strictly to combinations of capital, but applies also to all large corporations. It requires very slight knowledge of corporation law and very little knowledge of business conditions in the United States to realize the frequent insecurity of corporate investments, and to learn something of the wrong which the public suffers from much of our corporate management. This is said without any underestimate of the very important, even of the entirely indispensable need of our business community for the corporate form of business organization, and with the full knowledge that the corporate form of organization should be encouraged under proper restrictions. The United States has much to learn in this direction from England, and possibly still more to learn from Germany and some other Continental countries. It is possible to encourage the corporate form of doing business without at the same time throwing the door open to the exploitation by unfair means of stockholders and of the public. There is no in-

tention of asserting that all of our corporations are organized and managed without regard for the interest of the public and of the stockholders. But it is certain — and the late trust investigations have brought this out more completely than has ever been the case before — that these evils do exist in large measure in connection with the great industrial combinations, and that there still remains open a very wide and important field of investigation in determining just of what nature and of what extent these evils are, and how far and by what means they may be checked, and how the beneficial effects of the corporate form of business organization may be secured through improvements in our corporation laws.

Investigations of industrial combinations have not so far given very definite results regarding their influence upon wages and the conditions of workingmen. It is certain, as was stated earlier, that their organizers have at times felt that through combination their power over the workingmen has been increased, that through them they have become better able than before the organizations were made to resist demands which, from their point of view, were unjust, although from the point of view of the laborer they were probably entirely just. It is also established beyond question that in many cases the industrial combinations have increased wages beyond what they were before the organization was made. In many instances it has in all probability been true that these increases in wages have been due rather to improved industrial conditions than to the formation of the combination; but in certain instances it seems to be established that wages have been raised by the combinations when they would not have been raised, had the combination not been formed.

On the other hand, it is equally well established in individual cases that the combinations have closed factories

and discharged workingmen when, had the combination not been formed, the individual establishments would have been able to continue in business for an indefinite length of time and to give their workingmen employment. It seems also to be established that, through the saving effected by these organizations, they have, sometimes at least, been put into a position to increase wages for their workingmen, if they will, more than would have been possible, had the organization not been effected.

The investigations show very little change as regards the relations between trade unions and their employers. Some of the combinations seem ready to recognize trade unions and to deal with their leaders. Others take the position that they will in no case deal with the trade unions as such, but that they will make terms only with individuals. In most cases, probably, this is a matter rather of the individual predilections of the managers of the combinations than of any effect of combination. Further experience alone can determine whether the trade unions can so strengthen themselves in the future that by controlling a very large proportion of the workingmen in any one line of industry they will be able to hold their own with a combination of capital in the same line of industry. If this can be done, it is possible that there will be a saving of energy and a directness of dealing between the employers and the employees which may result to the benefit of both, though possibly to the disadvantage of consumers. Only the future, however, can determine what the outcome will be.

As has been intimated before, one reason for the formation of these combinations is the amount that can be saved in the cost of selling goods. Experience has shown that, when several different firms unite into one, if the industry is one in which travelling salesmen are employed, a large proportion of these salesmen, sometimes more than half, can often be discharged. In probably the great ma-

jority of cases where men have thus been relieved from work as salesmen, other work in connection with the combination has been found for part of them. Employers are loath to discharge men who have been faithful; and, where their services are not needed in one department, they are simply transferred to others. It is, however, still doubtless true that in very many cases travelling salesmen are left by the formation of the combination to seek employment elsewhere.

In individual cases, also, the work of the travelling salesmen has become so changed in its nature that persons of less skill may be employed, and wages thus be lowered. When competitors are seeking for the trade of an individual dealer, the most skilful salesman will be likely to secure his patronage. When, however, there is no competition, but the salesman has simply to take orders for goods needed, much less skill would seem to be required. Experience does not show, however, that this employment of cheaper salesmen has usually taken place. In many cases the sale of goods depends not upon a direct demand from customers, but upon the art shown by manufacturers, dealers, and salesmen in calling the attention of customers to these goods, and to the advisability of purchasing them. In consequence, then, even when there is no competition among salesmen, it is often true that the more skilful salesman can extend the business much better than one of less skill. From the statistical investigation made by the Department of Labor, it becomes evident that, although saving in this direction has been made, the result has been rather to make more efficient the work of travelling salesmen who were retained than to cut down their wages. In certain instances even, it was found that the combination had employed travelling salesmen, even when they had not been employed by the individual manufacturers before the combination was effected.

It is evident that the economic effect of saving in the way indicated is to be considered rather an advantage to the community than otherwise. Travelling salesmen may be considered as one class of middlemen; and the more direct the communication can be between the producer and the consumer, other things being equal, the greater will be the advantage to the public.

The experience previously referred to of the Brass Bedstead Combination and others of like nature in England indicates that for considerable periods of time at least both workingmen and employers have profited decidedly by joint action in combination.

It should be borne in mind, however, that in these combinations the benefit to the workingmen is not even supposed to come chiefly through their greater efficiency, as is the case in most profit-sharing schemes. The source of the added profits and wages is mainly found in higher prices paid by the consumer. If such combination between the employers and the employees were to become general, the workingmen would suffer as consumers from the higher prices to a degree which corresponded to their increase in wages. It is probable, however, as said before, that the field of enterprise which is open to such combinations will, for a long time to come, be so narrow that, if this form of combination is successful, it will still be possible for certain groups thus organized to profit at the expense of others. This, again, is one of the points which remains to be established by experience.

Within the last two years, sufficient data have accumulated in the United States to show conclusively certain temporary effects at least of the industrial combinations upon the prices of the manufactured product. By comparing carefully from month to month the prices of the leading raw materials with those of the finished product of several combinations along different lines, it has been

shown conclusively that a combination has been enabled, sometimes for periods of several years, to increase the margin between the raw material and the finished product to a considerable degree above what it was during the period of free competition preceding the organization of the combination. In certain instances a renewal of competition for short periods has lessened this margin, to be again increased when the competitors were bought up and the combination again consolidated. The increase in the margin may properly be considered an increase in price, although the absolute price of the finished product may not have increased at all. It is the normal tendency for the price of manufactured articles to decrease from time to time, with the improvements in machinery and methods of manufacture; and the effect of competition is seen chiefly in a lessening of the margin. This increase in the margin between the price of the finished product and that of the raw materials can hardly be considered a benefit to the industrial community, unless the condition of the industry before the combination was formed was unhealthful. The saving from combination that has already been indicated ought, in most cases, to bring about a sufficient increase in the profits of the combination to justify its existence without increasing the margin which covers the cost of manufacture and the profits of the organization. Whenever this margin increases, other conditions remaining equal, it must mean that either the price of the raw material has been lessened below former competitive rates by the monopolistic power of the purchaser or that the selling price has been increased above former competitive rates by the monopolistic power of the seller. It is possible that in exceptional cases, when competition has been abnormally fierce, this increase in the margin is economically justifiable and in the interests of the public. The fact, however, seems to be established by the comparison of the figures above noted, together with the very

large profits which have, beyond doubt, been reaped by some of the combinations, that this increase in the margin, while doubtless in the interests of the stockholders of the combinations, has at times, perhaps often, been directly against the interests of the public at large.

While the facts, then, show so far that some of these instances of increase of price have clearly been contrary to the interests of the public for the time being, the ultimate effects of the combinations in this direction is by no means yet settled. It has already been noted that competition has at times lowered this margin, when it had been increased by the combination. It has certainly been true in very many cases that the eagerness on the part of the combination to reap very large profits in a short period has encouraged new competitors to come into the field, and thus again force the margin down. The experience of two or three of the most successful and long-lived of the combinations in Germany and Austria as well as in this country seems to show that it may be possible, through the saving effected by combinations and through their power in the market, to maintain a permanent price somewhat above the competitive rate. But all indications of experience serve to show, likewise, that, if this is to be done, the margin of profit must be kept on the whole moderate. The increase above the competitive rate cannot be a large one. It is probable, even, that in times of emergency, when the demand is very strong and very large profits might be reaped, the combination has been and must be constrained to take only moderate profits, in order to maintain its control of the market after the favorable conditions have passed.

While we may say, then, that it has been clearly established that prices can be raised, and have been raised for considerable periods of time by the combinations, and while it may with equal certainty be asserted that combinations have not infrequently lowered prices below even the cost

of production for short periods in order to force would-be-competitors out of business, the asserted power, perhaps even the probable power, of combinations to maintain prices permanently above competitive rates, without calling into the field powerful competitors, remains still to be fully established by longer experience. In individual cases it has been shown that for considerable periods of time prices have been kept by the combinations much steadier than under competition. Of course, these conclusions regarding the effects of combinations upon prices do not refer to prices fixed by legal monopolies or even to those fixed by the so-called natural monopolies, but only to those of combinations in manufacturing industries which have been characterized as capitalistic monopolies.

In political discussion of late years the illegal corrupt influence of the trusts in political life has been asserted with perhaps greater emphasis than any other charge made against them. It may be considered established that corrupt influence has been exerted by these combinations. It has not, however, been established that the influence of the capitalistic combinations has been more corrupt than that of the large natural monopolies, like the railroads and the telegraphs, or than that of individual firms of large means whose interests were closely connected with legislative measures. The remedy for the evil is still to be found.

Similarly in political discussions much emphasis has been laid upon the supposed evil social effects of the combinations. It has been thought that through their influence it has become difficult for individuals to start business independently, and that young men are practically forced into the position of mere employees. It has been believed, also, that this state of affairs has a strong tendency to lessen the power of individual initiative in business life and to impair materially the ability of busi-

ness men for self-government. Such questions can never be settled by count of heads; and, if they can be settled at all, it must be through experience extending over a very long period of time. It has beyond question been shown in many individual instances that individuals who are managing independent establishments have been compelled to take subordinate positions in great combinations. It has not yet been shown, however,—and it is questionable if it can be shown,—that either the individual himself or the industrial or political community has been injured thereby. It is probable that in some cases hardships have thus been endured: it is also probable that in other cases men have been prevented from securing positions as influential and possibly even as useful as they might have secured under a competitive régime; but it is none the less probable that other men have been given better opportunities for developing their really great powers, and that even some of the weaker men have been able to render greater service to the community in their subordinate positions than it would have been possible for them to render, had they remained entirely independent. General social disadvantages form the best subjects for political denunciation and for eloquent speeches by campaign orators; but these are not matters that can readily be settled by experience, and it is certainly true that the general social influences of the trusts have not as yet been made out. It is still open for debate, and doubtless will remain open for many years to come, whether their influences in this direction tend, on the whole, more towards evil than towards good. One should not forget that the same fears regarding the social effects of the factory system have troubled many philanthropic people for decades. The question is by no means a new one.

Evils in connection with the trusts have thus, beyond doubt, been established. Benefits coming from the trusts

have likewise been established beyond doubt. Many remedies for the evils have been tried. The conclusions regarding these remedies which can, at the present date, be positively reached are few.

It may perhaps be considered settled that most of the laws which have aimed directly at the destruction of the combinations have proved in great part failures. What would have been the case, had they not been passed, is, of course, not to be known; but apparently they have had very slight effect, if any, in checking the tendency towards combination. On the other hand, these statutes and the common law as interpreted by the courts have, beyond doubt, had effect in determining to a certain extent the form of the industrial combinations. In this country, when combinations on a large scale were first attempted, the usual form was that of an agreement regarding the extent of the output of the different establishments, and sometimes regarding the price at which the product should be sold. These agreements, it was found, were frequently broken; and, wherever there seemed to be any likelihood that such contracts were intended to control the market, the courts were inclined to hold them illegal, and to refuse to enforce them. The result of this was, of course, an effort to secure a firmer form of combination. The first most prominent attempt was that of the "trust" adopted by the Standard Oil Company, the Sugar Combination, the Whiskey Combination, and some others. This form seemed for a time to give the requisite stability, and from that point of view to be successful. Decisions of the courts, however, and legislation directed against this form of the trust, showed that it was impracticable. In consequence, that form soon gave place to that of the single corporation. When different establishments thought it wise to combine into one, a corporation was formed which bought up all of the separate establishments, whether owned by corporations or by in-

dividuals, and held them as property. This change in form was, beyond doubt, to a great extent the direct result of hostile legislation and court decisions. Another form of combination, now not uncommon, which returns somewhat towards the trust form, while retaining the responsibilities of the corporation, is that in which all of the members desiring to unite are put into the form of corporations and a single large unifying corporation is formed which buys the controlling shares of the stock of each of the separate establishments, in this way securing control. Under the laws of several of our States it is permitted to a corporation thus to hold the stock of another corporation, and this form of organization seems to be growing more common.

Our legislation and court decisions have also modified somewhat the legal doctrine concerning restraint of trade. In certain States, at any rate, our courts are much more inclined than at earlier times to hold that a contract in restraint of trade is contrary to the public interest and void, even when in form it contemplates only a partial restraint. In many cases this has probably been true where twenty years ago the contracts would have been held valid.

Similar results seem to be shown by considering the experience of other countries. In Germany, contracts for division of the market and fixing of prices by a central selling committee or bureau, so as to secure what the court considers reasonable, not extortionate profits, are considered valid, even when they are sufficient to give a practical monopoly of any industry. On the other hand, the courts of Austria seem rather to have taken the position of many of those in the United States, and to hold such contracts illegal under a statute of 1870. The consequence there seems to be that the combinations are looking about to secure some other form of organization which may satisfy the law, and which will still give

them the right to combine as freely as ever. The tendency towards combination in all countries seems to be substantially the same. The differences in the laws, and in the business habits of the people, seem to change only the form of organization.

It seems to be established by practically universal experience that the greatest evils of the industrial combinations spring from acts that can be kept secret or that cannot, at any rate, be fully established in the eyes of the public. This is shown by the unwillingness which many of the larger combinations show in publishing information such as large corporations on a sound basis have no hesitation in presenting; by the strong tendency towards encouraging speculation in their stocks, a matter which is also furthered by secrecy; by the unwillingness which the larger combinations show towards taking the form of a single corporation in those countries where corporations are required to make public in considerable detail the nature of their business at the time that they enter into the combination, and detailed annual reports thereafter; and by other similar lines of proof.

As regards the main remedies, then, that have been proposed, and that different countries have attempted to enforce, perhaps we may consider as established this: First, that a removal of special discriminating favors to the combinations will check their power over the consumers in individual cases, but that combinations may flourish without such discriminations. Second, that the removal of a protective tariff on the goods of such a combination would prevent it in certain instances from securing as high profits as otherwise and from increasing its prices to consumers as much as might otherwise be the case. To this should be added, however, the further statement that this remedy in many cases, if rigidly applied, would practically drive the industry from the country, and turn that line of business over to foreign competitors. In certain instances

this might be to the advantage of the country, as a whole; in other instances, probably to its detriment. Each case still needs to be studied by itself before any specific conclusion can be reached. No general conclusion is possible. Third, specific destructive legislation against these combinations has not materially hindered their growth, though it has brought about decided changes in their forms in this and in other countries. The legislation, apparently, which those combinations whose acts seem most detrimental to the public are most inclined to fear, is that which through indirect means will bring their practices directly before the public, and which, while not attempting to destroy them, does put them under restrictions which can be enforced by public officials.

Further legislation than this, such as various forms of taxation, has tended towards modifying the form, but not as yet towards affecting materially the growth of these combinations. The result of other legislation, and the more definite results even of these forms of legislation indicated, must still be a matter of further experience.

JEREMIAH W. JENKS.

CORNELL UNIVERSITY.

## ENTERPRISE AND PROFIT.

SINCE the appearance of my article in this Journal for April, 1892, in which I advanced the theory that "enterprise," or the assumption of risk, was the distinguishing function of the *entrepreneur* (or, as I would prefer to call him, the "enterpriser" *), and that profit, in the strict economic sense of the term, was the economic reward for services rendered by the assumption of industrial risks, an interesting though somewhat desultory discussion of the allied subjects of risk, speculation, and insurance has been carried on.†

Although much that I advanced in support of "The Risk Theory of Profit" has been generally accepted, I cannot flatter myself that the theory itself has wholly commended itself to students of the science. Nevertheless, my ideas on the subject seem to have obtained a sort of qualified and ineffective acquiescence; and, so far as I am aware, no other explanation of the nature of indus-

* I have used the word "enterpriser" to denote the person who is entitled to the reward of his enterprise, or risk. If I am correct as to the nature of profit, the word is synonymous with *entrepreneur*, and should be substituted for it, both because it is an English word and because it explains the idea involved much more accurately. The word "enterprise" is in common use as a synonym for a business venture. "Venture" and its derivatives would perhaps answer the purpose; but they do not seem to me as fit, as the idea of purpose does not seem to be so clearly connoted. When we speak of a venturesome person, we imply that he assumes unwise risks,—risks that will probably average against him. Thus we call a gambler or a speculator venturesome, an active business man enterprising. Even if I am wrong about the identity of the *entrepreneur* and the enterpriser, there is still a name needed for the assumer of business risks.

† See the following articles in the *Quarterly Journal of Economics:* "The Fundamental Error of *Kapital und Kapitalzins*," by F. B. Hawley, vi. 280-307; "The Risk Theory of Profit," vii. 459-479; "Insurance and Business Profit," by John B. Clark, vii. 40-54; "The Place of Abstinence in the Theory of Interest," by T. N. Carver, viii. 40-61 (see foot-note on p. 58); "Risk as an Economic Factor," by John Haynes, ix. 409-449. Compare "The Place of the Speculator in the Theory of Distribution," by Professor Henry Crosby Emery, *Papers and Proceedings of the Twelfth Annual Meeting of the American Economic Association*, pp. 103-118, with remarks by President Hadley, Professors Carver, Commons, Giddings, Ripley, and Mr. Emerick.

trial profit, equally satisfactory, has been advanced in its place. The whole subject of profit and loss has been so long enveloped in fog that economists seem to have reconciled themselves to the situation, and have fallen into the habit of assuming that this dark corner of the science cannot be hiding anything of real importance. If, however, it turns out that enterprise is really entitled to rank as the equal of the other productive forces,— land, labor, and capital,— its exact nature can hardly be a matter of indifference. And it may well be true that a competent understanding of the industrial force which, in the one respect of being the only directive force, is even superior to the others, will supply the omitted premises which, to the reproach of economics, have so often stood in the way of the practical application of its principles.

Of course, I must not be understood as criticising this general attitude of economic thinkers. If the Risk Theory really forms an adequate explanation of the phenomena of profit and enterprise, the reason that it has not been more warmly welcomed must be found in the manner of its presentation. This paper is, accordingly, written in hopes of clearing up some of the ambiguities and misunderstandings which still surround the following branches of the subject: —

1. The connection between Enterprise and Co-ordination.
2. The relation of Insurance to Enterprise.
3. The relation of Speculation to Enterprise.

The present standing of the Risk Theory of Profit can perhaps best be shown from the following quotation from Mr. John Haynes's article on "Risk as an Economic Factor": * —

Mr. F. B. Hawley, in a criticism of "Boehm-Bawerk," has advocated the theory that the *entrepreneur's* function is that of the risk-taker, and that profit, his reward, is the pay for risk-taking, or "enterprise." The question whether or not the *entrepreneur* is a risk-

* *Quarterly Journal of Economics*, ix. 423.

taker depends on the conception of an *entrepreneur*. Mr. Hawley's idea is that he is a man in active business affairs who is responsible for the capital he is using, or is the owner of it himself. That the *entrepreneur* is a risk-taker cannot, I think, be questioned if we take the view Mr. Hawley holds, and, indeed, the view generally held, of the nature of the *entrepreneur*. But is the *entrepreneur* the only risk-taker? To be consistent, this view must include among *entrepreneurs* all lenders of money who receive anything above the minimum of interest. It is universally agreed that gross interest contains a loading which is due to the risk encountered by the lender. If, then, Mr. Hawley is logical, the man who loans his funds to hazardous enterprises is an *entrepreneur*. This view has something to commend it, as it leaves the capitalist, as the receiver of net interest, the reward for the employment of capital when used in the safest possible channels. But this is not all. We must consider the question whether the laborer can be a risk-taker. Mr. Hawley himself, in his controversy with Professor Clark, proves conclusively that other things than capital can be risked. Life and reputation, time and future wages, all can be risked. The man who performs the function designated as labor by economists undergoes risk, as well as the possessor of capital. This is too familiar a fact to need proof. It was treated by Adam Smith, where he said, in speaking of different employments, that "the wages of labor vary according to the probability or improbability of success in them." This being true, if Mr. Hawley is to be consistent, he must include among *entrepreneurs* every laborer who is able to exact from society any compensation for assuming a risk. Doubtless such a system might be worked out which would be perfectly logical and consistent with the facts. We might start with the proposition that there are three kinds of cost,—personal exertion, abstinence,—or waiting,—and risk-taking. No man could be found who suffered any one of these costs in its purity, but it would be a logical carrying out of the idea that distribution must go entirely by functions discharged. Though we might construct such a system as this, it is doubtful whether it would be of any value to our science. The problem of distribution with which economists are struggling is, in large part, the problem of what classification of the facts brings out recognized truths most clearly and in due perspective. It seems to me that the method which would make insurance a co-ordinate subject in distribution would have no special merit in this way.

This is a very lucid, comprehensive, and exact statement of my argument. The view of the *entrepreneur*, or

"enterpriser," here attributed to me is exactly the one I am contending for. I hold that all individual incomes are composite, and that it is hard to imagine one that does not contain an element of profit and loss, as there is an element of uncertainty in the income of everybody. Uncertainty and risk are connotations. The one cannot exist without the other. The moment any element is determined, uncertainty ceases. It is therefore only in the undetermined residue that uncertainty inheres. A residue, until finally determined, connotes a risk; and a risk connotes an undetermined residue. The moment a residue is determined, the risk is annihilated. If, therefore, profit is a residue,—and all are agreed on this point,— it must, when finally realized, be partially, at least, the result of a risk assumed.

It also seems to me a little unfair to demand of a proposed theory of profit what no one ever thinks of demanding of the theory of rent or the theory of wages or the theory of interest. Where is the landlord to be found who is not also a capitalist and a laborer? Where is the laborer who does not possess at least a pair of overalls or a dinner-pail, and, perhaps, even a patch of land? Where is the capitalist who is not also a laborer or a landlord? Yet we find no difficulty in differentiating landlords, laborers, and capitalists, according to their predominant industrial functions. To my mind the fact that any given theory of profit was founded upon a function exercised by individuals who exercised no other industrial function would induce suspicion rather than assent.

Again, I am disappointed that, having gone with me as far as he does, Mr. Haynes objects that "it would be the logical carrying out of the idea that distribution must go entirely by functions discharged."

Of course, the distribution of the product among those who produce it can be arranged under a number of classifications. Aided by statistics, we might determine how

much those between certain ages received or what proportion of it went to males and what to females. For certain purposes these or similar classifications might be useful, but such purposes will always be found to lie outside of the subject of income itself. I must confess myself unable to comprehend how income can be analyzed at all except by means of a classification founded upon function, nor how, when a function is recognized as distinct from all others, it can be refused a place in the classification of functions, even if it is seldom or never exercised by any individual who is not also exercising another function.

Surely, the functions of land, labor, and capital, are universally regarded as causing the distribution of the product into rent, wages, and interest. The landlord bases his claim for rent upon his possession of the land, the laborer his claim for wages upon his expenditure of physical effort, the capitalist his claim for interest upon the productivity of his capital. Both Professor Clark and Mr. Haynes grant that enterprise exercises a serviceable and, therefore, a productive function distinct from all others. Why, then, is not the assumption of the risk, inevitably involved in dynamic production, a sound basis for the enterpriser's claim for a separate reward distinct from all others, even if we refuse to identify him with the *entrepreneur?*

Mr. Haynes fears that the recognition of enterprise as the basis of profit will not be fruitful. It could well be asked, How can he be sure of this before economic doctrine has been reconsidered in the light of the new principle? Moreover, as pure interest is certainly not over two per cent., and as the gross return of interest and profit is certainly over six per cent., the aggregate amount of profit is surely twice and possibly three or four times as large as the aggregate of pure interest. A correct theory of profit, therefore, should be at least as im-

portant to the science as a correct theory of interest. But, granting that his apprehensions are realized, is any reason thereby afforded for denying its proper place to a valid principle? We have usually in economics several classifications to choose from, any one of which may surpass the others for certain purposes and be inferior to them for other purposes. In such cases, of course, we enjoy liberty of choice; but we are never authorized to use part of one classification conjointly with part of another. We cannot, therefore, treat rent, wages, and interest as fundamental forms of industrial income founded on function, while refusing to place the reward of enterprise by their side, unless we can demonstrate that the latter is not a distinct form of industrial income also founded on function. And that it is such is admitted by both Mr. Haynes and Professor Clark.

Fortunately, Mr. Haynes, in the closing paragraph of the quotation, gives us an insight into the real reason of his indifference to the reward of risk-taking. He is perfectly correct in asserting that "insurance" is not a subject in distribution co-ordinate with rent, wages, and interest, because insurance is not a form of income at all. Profit or loss is the final result of a risk undergone; insurance, merely one of the means by which certain risks can be avoided or shifted. This distinction will be discussed more at length later in the article.

I now venture to quote from Mr. Haynes's pages the following succinct and clear statement and analysis of Professor Clark's objections to the Risk Theory of Profit:—

We now turn to Professor Clark's criticism of Mr. Hawley. The whole criticism consists in putting forward Clark's peculiar conception of the *entrepreneur*. According to Professor Clark, the reward of risk-taking belongs to the capitalist. The *entrepreneur* is the coordinator of capital and labor, nothing more. His reward is pure profit. Professor Clark says: "We have used the term *entrepreneur* in an unusually strict sense, to designate the man who co-

ordinates capital and labor without in his own proper capacity furnishing either of them. Yet our eyes are open to the fact that the living man who performs this function has to do other things also. It is only in the one limited capacity that we have called that of the *entrepreneur* that the man is confined to co-ordinating the elements furnished by others. . . . In performing this function, he contributes to industry nothing but relations. He connects labor and capital with each other in his own establishment. He connects this establishment with others, and makes it do its part in the general industrial system. He becomes the owner of the products of this industry as they are turned out, and sells them in the market for what he can get. In acquiring this ownership, he must pay all the costs entailed in creating the product; and among the costs to be thus defrayed is the entire sum made over to the capitalist as an offset for risk." Professor Clark excludes from the function of the *entrepreneur* every activity which can possibly be classed as labor; and, moreover, the *entrepreneur* possesses "no dollar." Accepting Professor Clark's conception of the *entrepreneur*, the result follows that he is not a risk-taker; for he has nothing to risk. It is admitted that no single example of the pure *entrepreneur* can be found anywhere. This fact seems to me a serious indictment of the conception.

We are not satisfied with the above conception of the *entrepreneur*. It seems it would be better to understand the phrase, "co-ordinator of capital and labor" (which is a very happy expression) in a wider sense. The *entrepreneur* is a co-ordinator in no passive way,— as merely furnishing a relation,— but he is a person of activity. He makes the relation. He must first be a laborer himself. Then he must have a capital of his own, unless he can get the use of capital as a gift from some relative or friend. Because he is both a laborer and a capitalist, he is able to co-ordinate labor and capital.

Up to this point I find myself in exact agreement with Mr. Haynes. When, however, he goes on to say, as he does in the succeeding paragraphs, that the *entrepreneur* is only a "special kind of laborer," I must dissent.

It is not the purpose of this paper to discuss distribution, but it is absolutely necessary to outline as briefly as possible the distributive system before going further in the discussion of our subject. The essentials of production are two,— labor and capital. The man whose distinguishing function in the productive process is personal effort is a laborer, whether he carries a hod or is President of the United

States. A man who possesses wealth which is used productively is a capitalist. If he co-ordinates his capital with his own labor or that of others, he is an *entrepreneur*,— he is a special kind of laborer. All laborers are co-ordinators of capital and labor; but the *entrepreneur* is distinguished from other laborers by the fact that his own capital (or capital borrowed on his credit, which amounts to the same thing) is co-ordinated with labor, while the simple laborer brings nothing but his personal qualities to the productive process. . . .

The question arises, What is profit? Without going into an extended discussion of the matter, we may say that it is the reward that comes to the *entrepreneur* on account of the special advantage which he has to use his talents and employ his capital from the fact that he is both laborer and capitalist. If we can find out what his income would be if he loaned his capital to others, and also sold his services to others in such a way as to run the same risk and perform the same amount of labor as he does as an *entrepreneur*, the difference between his income and the total income which he receives as an *entrepreneur* represents the reward that comes to him from the fact of his double function, and may be called profit.

There is no more reliable thread to serve us as a guide through the labyrinth of economic discussion than a comparison of any apparent result with the corresponding idea underlying popular conceptions. There is surely something intuitive in the accumulated result of the unconscious cerebration of the race. The popular conception of the term "profit" carries with it two inseparable connotations. The first is that profit is a residue; the second, that it is a form of income distinct from and coequal with rent, wages, and interest. Any definition of the nature of profit which violates either or both of these connotations antagonizes our instinctive perceptions, and requires, therefore, exceptionally clear and distinct proof. And I am sure that neither Mr. Haynes nor Professor Clark will object to their conception of profit being tested by the popular connotations of the term.

Now Mr. Haynes certainly violates the second connotation when he speaks of the *entrepreneur* as a "special kind of laborer," as in that case profit must be a special kind of wages,— wages of management, or, at least, some-

thing analogous to wages of management. But wages of management are always either a predetermined sum entering into the *entrepreneur's* cost or are susceptible of predetermination. So it would appear that Mr. Haynes's conception also violates the connotation that profit is a residue unless he can show that the wages of co-ordinating cannot be predetermined, which he will find to be a somewhat difficult matter.

However, in the last paragraph quoted above — the one in which Mr. Haynes answers the question, "What is profit?"— he seems to change his ground. His *entrepreneur* is no longer a "special kind of laborer," but has become a special kind of monopolist, whose gains come to him "on account of the special advantage which he has to use his talents and employ his capital from the fact that he is both a laborer and a capitalist." Now, as I have pointed out elsewhere,* monopoly gains (except, perhaps, in the case of land rentals) are not a distinct form of income, coequal with wages, interest, and profit, because monopoly is only a distributive force, and not a creative or productive force, like land, labor, and capital, or like enterprise, whether we consider the reward of enterprise to be profit or something else. Except indirectly, as such gains serve as a stimulus to invention, the world as a whole is no richer for the gains of monopoly. What accrues to the monopolists is subtracted from the income of the rest of the community. On the other hand (when once private ownership of land has been established), the man who allows the use of his land to another, the man who allows another to occupy his house, who furnishes another with tools, who retains possession of raw material in process, who holds the finished product to await the convenience of the final consumer, who exercises his physical or mental powers in the rendering of services or in fashioning commodities, and also the man who relieves another of a risk which he is better able to

* "The Risk Theory of Profit," *Quarterly Journal of Economics*, vol. vii.

bear than the man he relieves,— each renders a service for which the world is richer, creates utility, and is entitled to a return. Mr. Haynes's second definition of profit therefore violates the connotation that it is a primary form of income.

Moreover, Mr. Haynes's formula for ascertaining profit is theoretically as well as practically impossible of application. The *entrepreneur* cannot possibly sell "his services to others in such a way as to run the same risk" and leave any surplus behind him; for, if he accepted a stipulated sum, he would no longer run any risk at all. It would be simply a case of insurance, such as will be explained later. If, on the other hand, he accepted a stipulated sum as his wages of management or co-ordination, with the added condition that there should be added to or subtracted from that sum the gains or losses of the business as they eventuated, the whole surplus in question would have to be turned over to him. Before the change was made, the undetermined surplus was his; and he would not, of course, abandon it without receiving an equivalent. Being barred by the condition stated from receiving a definite sum as such equivalent, he would demand an undetermined sum equal to the undetermined surplus.

It is not quite clear to my mind what Professor Clark means by co-ordinating capital and labor; and I cannot, therefore, positively affirm that he would accept Mr. Haynes's answer to the query, "What is profit?" * But I am safe, I think, in assuming that he also regards profit as either a species of wages or a species of monopoly gain, or some compound of the two ideas. I at least cannot understand how co-ordination can possibly obtain any other kind of reward. The co-ordinator goes into the

* Professor Clark says, "Defray all the expenses of bringing a product into existence, sell the article for what you can get, and, if you have anything more in your hands than you had at the beginning of the operation, you have a true profit." *Quarterly Journal of Economics*, vii. 41.

market, selects the raw material most suitable for his purpose, buys it at the cheapest possible price. He hires the laborer and puts the raw material in his hands, and tells him what to do with it and how to handle his tools. He furnishes shelter and tools to the laborer, and subjects him to rigid regulations. He takes the finished product, and uses his judgment as to the best market and the best time in which to sell it. His function is the constant exercise of ingenuity and judgment, which, theoretically at least, can be exercised just as well when he has no financial interest in the product as when he is the owner, just as well when he is a hired manager as when he is a principal. In either case, what he personally obtains for the exercise of his ingenuity, watchfulness, and judgment, is of the nature of wages. He is rewarded by wages of management; and, if his ability as a manager is exceptional, his wages will be and should be exceptionally large. They will be augmented, that is, by a monopolistic accretion. Now of course the co-ordinator may be worth more as a co-ordinator to himself than to any other employer, both because he will be less interfered with and because he will naturally work harder for himself than for a salary; but this circumstance does not change the nature of his income as a co-ordinator. Professor Clark's and Mr. Haynes's conception of the co-ordinator includes, of course, more than this. The mistake they make, as it seems to me, is that this something more is not an act of co-ordination. What is it that elevates the mere co-ordinator, the manager, into the co-ordinator in their meaning of the term, which is synonymous with *entrepreneur?* Professor Clark himself tells us (I quote him again): —

> We have used the term *enterpreneur* in an unusually strict sense, to designate the man who co-ordinates capital and labor without in his own proper capacity furnishing either of them. Yet our eyes are open to the fact that the living man who performs this func-

tion has to do other things also. It is only in the limited capacity that we have called that of the *entrepreneur* that the man is confined to co-ordinating the elements furnished by others. Here he is so confined. In performing this one function, he contributes to industry nothing but relations. He connects labor and capital with each other in his own establishment. He connects this establishment with others, and makes it do its part in the general industrial system. He becomes the owner of the products of this industry as they are turned out, and sells them in the market for what he can get.

In other words, it is the fact of proprietorship. To obtain an income of profit, the co-ordinator must own or control the things he co-ordinates. Professor Clark indeed asserts that this ownership, though a necessary one, is still a mere incident; but I am confident that, if he will reconsider the matter, he will recognize that it is really the very essence of the matter in dispute, and that he does not differ from me as radically as he supposes.

Now it must be granted that it is impossible for any one to earn a profit without performing an act of co-ordination.* And it is equally impossible to do so without some amount of physical effort. So, also, it is impossible to make a loan without expending a small amount of personal exertion and performing at least one act of co-ordination; but no one on that account considers the loaning of capital to be a mere incident to the exertion of finding a trustworthy borrower, and that, consequently, interest is the reward of labor and a kind of wages. On the contrary, it is the personal exertion or labor of arranging the loan which is incidental to the capitalistic function of loaning. And, in exactly the same sense and degree, any acts of co-ordination performed by the *entrepreneur* are merely incidental to his ownership of the enterprise. If such acts of co-ordination are performed wisely, the *entrepreneur's* income will indeed be increased; but so,

* For, even when everything is left to a hired manager, his selection is an act of co-ordination, though it may be and sometimes is the only act of co-ordination performed by the profit-recipient.

also, will the income of the capitalist be increased by personal diligence and good judgment. The cases of the capitalist and of the *entrepreneur* are not merely analogous: they are absolutely parallel, the only difference being that ordinarily the affairs of capitalists require less personal attention and less co-ordinating than the affairs of *entrepreneurs.*

Now why is it that this fact of the ownership of the *entrepreneur* is so significant? If both selling price and cost, inclusive of his own wages of management, were absolutely predetermined and certainly known to everybody else as well as to himself, would there be any such thing at all as profit? Manifestly not, for then cost and selling price would always equal each other, unless the producer enjoyed some personal or monopolistic advantage that kept others from competing with him; and in this case his additional income, above wages of management, would be entirely a monopolistic gain. There exists a quite common business arrangement which aptly illustrates this condition of affairs. It is that of the broker who buys on order, and, on occasions (for the purpose, usually, of keeping the two apart) has the goods charged to him by the seller, and then bills them at the same price to the buyer, and sends in a bill for brokerage either to the buyer or to the seller or to both. There is, of course, a small element of risk to the broker in this transaction; but the additional business thereby secured is considered by him to be the equivalent or more than the equivalent for the risk. There is here no real difference between cost and selling price. If the broker possesses influence, good will, or other personal advantages which enable him to secure more brokerages than his personal labors are really worth, his income consists wholly of wages of management plus some gain from monopoly. We have here both coordination and ownership and yet no element of profit, from which it appears that the peculiar income of the

*entrepreneur* arises neither from co-ordination *per se* nor from ownership *per se*. The element of "profit," however, or of its complement, "loss," is attendant upon co-ordination when co-ordination happens to be an incident of ownership; and it is attendant upon ownership only so long as either cost or selling price is undetermined, so long only as ownership involves risk.

In the last analysis an act of co-ordination cannot possibly be anything more than the exercise of a choice. If I am correct in this, it would seem to settle the question between the mere co-ordinator and the enterpriser in favor of the latter. The co-ordinator is the one who makes the choice, who decides; and this he can do either for himself or for others: the enterpriser is he who assumes the consequences of the choice, whether the choice be made by himself or by others acting as his agents. When the two happen to be different persons, it is not the chooser, but the assumer, who gains or suffers by the transaction. Consequently, when the same person happens to be both chooser and assumer, both co-ordinator and enterpriser, the results of the choice accrue to him as "enterpriser *per se*," and not as "co-ordinator *per se*." At the time of choice the results of the choice are necessarily undetermined. It is, therefore, only the "enterpriser *per se*" who is entitled to the undetermined residue or profit of the transaction.

That there is an ever-present and indissoluble connection between risk and profit seems now to be proven. This same relation of risk to profit can perhaps be made more evident to some minds in another way, or, rather, in another form of words, the logical process being really the same. All are agreed that profit is a residue; but, until any transaction is completed, what the residue will amount to is a matter of uncertainty. The class of producers, therefore, who consent to accept this uncertain residue as their share of the product, assume a risk; and

part, at least, of the residue must be considered as their remuneration for the assumption. Even if we should grant — what is no longer possible — that wages of management and monopoly gains are components of this residue, the fact that these wages and gains were not predetermined would leave in the residue an element of risk entitled to compensation. We see, therefore, that residue connotes risk, and that risk connotes residue: the two are inseparable. Now, if residue and profit are connotations, and residue and risk are also connotations, it is a necessary corollary that profit and risk connote each other.

Now how does it happen, if I am correct, that so able a thinker as Professor Clark overlooked these connotations? The explanation can, I think, be found in the very title of his paper, "Insurance and Business Profit." Used in this connection, the word "insurance" carries with it the unconscious implication that it is the reward for assuming a risk; and, as an insurance premium is always a predetermined sum, the vital connection between the reward of risk and undetermined residue is obscured. Insurance is an element of cost, as Professor Clark rightly claims, whether such insurance is paid by the *entrepreneur* to the owner of the plant which he rents or to the capitalist whose funds he borrows as a protection against fire in the one case and against his own failure in the other case; and in both cases such insurance lessens the undetermined residue which constitutes profit.

Now, if I am correct in claiming that enterprise is the real function of the *entrepreneur*, what actually occurs is exactly what the Risk Theory of profit would lead us to expect. Whenever any given *entrepreneur* shifts his function upon another by insurance, his own expectation of reward is cut down. If his risk of fire is 1 per cent., and he insures the risk at 2 per cent., his expectation of profit is just 1 per cent. less than it was before. On the other hand, if Professor Clark is right, and profit is the

reward of co-ordination, the *entrepreneur's* expectation of gain should be increased by the above transaction, because his insuring his property against fire is an additional act of co-ordination; and an increase of co-ordination, other things being equal, should lead to an increase of reward.

Of course, as Professor Clark says, no man who has nothing in the shape of a guarantee can assume a risk; but it does not follow from this as a corollary fact that "it goes without saying that the hazard of business falls upon the capitalist." As I have elsewhere shown, the hazard of business can fall upon land or labor, as well as upon capital. This objection, however, does not go to the root of the matter. The real reply is that the reward of the *entrepreneur* is due to him, not because he is the possessor of an opportunity, but because he avails himself of the opportunity. It is not the power to exercise his peculiar function, but the actual exercise of it that brings him gain. It is not because he possesses brain power or muscle that a laborer can earn wages, but because he exercises these powers productively. The miser who buries his gold is not a capitalist. He only is a capitalist who loans his wealth to others or to himself for productive purposes. A man is not an enterpriser simply because he has something which he could risk, be that something accumulated wealth, appropriated natural resources, physical or mental ability, monopoly privileges, or even character and reputation, but because he actually risks these things or some of them in the process of production.

But it may be asked, Why can we not regard the reward of risk as accruing in the shape of an additional award to the industrial force subjected to the risk, as Professor Clark has done in the case of the capitalist? In other words, why are we not at liberty to treat the gain of enterprise as the writer himself has treated the gain of monopoly? A moment's consideration will supply us with a reply. Monopoly is only a distributive force,

whereas enterprise is a creative, or productive, force,—a distinction which is fundamental in economics.*

In his lately published work, *The Distribution of Wealth*, Professor Clark correctly claims that "profits" tend to decline as static conditions are approached, and would be eliminated entirely if static conditions should be fully attained. Whichever we regard as the source of profit, both co-ordination and enterprise are surely dynamic forces. To eliminate profit wholly, however, static conditions must be more absolute than is indicated in Professor Clark's work. Not only must labor and capital remain unchanged in their aggregates,—individual laborers remain constant in their efficiency, and individual capitalists neither increase nor diminish their resources; but, to insure perfect fixity of both cost and amount of production, there must be a cessation of all variations due to the changeableness of the environment; due, that is, to such causes as the progress of the seasons, fire, lightning, hail, the dangers of the sea, and even those incident to natural

* Professor Clark's acknowledgment that enterprise is a productive force is to be found in the following extract from his essay on "Insurance and Business Profit": "Professor Mangoldt in Germany and Mr. Frederick B. Hawley in this country have made a definite contribution to our knowledge of the principles governing business risk and its reward. Working independently, they have reached one conclusion that cannot be overthrown. In a sense there is a net gain realized from risk-taking. Men do not hazard their capital for an amount of annual gains that in a long term of years will just offset their losses. They demand more than this, and get it. If the chance of losing one's entire capital in a year be as one in a hundred, the natural offset for this hazard will be a gain of more than 1 per cent. of the capital exposed. If, of a hundred men engaged in a particular business, one fails each year, the ninety-nine will get enough to more than make good, to the group as a whole, the destruction of capital entailed by a single failure. The wealth represented in this department of business is not only kept intact, but is increased by virtue of a gain that is the direct reward of risk-carrying. To every other industry, and therefore to society as a whole, there accrues each year an accession of wealth that is the offset for perils encountered. Business repays men, not only for their labors, but for their fears." *Quarterly Journal of Economics*, vii. 40. Later in the article he demonstrates with beautiful clearness and conciseness just how the assumption of risk creates value by rendering a service in transferring risks from those to whom their subjective value is great to those to whom their subjective value is less.

growth and decay. We must imagine industrial society in the static condition as an automatic machine, endowed with perpetual motion and working without friction in an absolutely unchangeable environment. Under such circumstances, according to the Risk Theory of profit, profits would of course disappear, because no uncertainties would remain. The Risk Theory is, therefore, entirely in accord with Professor Clark's line of argument in his book.

On the other hand, something more than Professor Clark has yet given us is needed to bring the Co-ordination Theory of Profit in accord with his theory of statical conditions. If the "reward of risk" insures to the capitalist as such, and not to the *entrepreneur* as such, it is either a kind of interest or it is a peculiar form of income, differing from either wages, interest, or profit. In the latter case it should not have been omitted from Professor Clark's analysis. In the former case should he not have explained to us why, unlike other forms of interest, it tends to disappear as the static state is approached? As cost and selling price become more and more fixed, as uncertainties become certainties, risks cease to exist; and the rewards of risk are, of course, no longer attainable. But this growing fixity of cost and price, this decrease in uncertainty, as the static condition is approached, is the very reason Professor Clark advances to explain the decline of profit and its final extinction when the static condition is completely attained. If, therefore, Professor Clark is correct in refusing to identify the "reward of risk" with "profit," are we not entitled to an explanation of the fact that all the influences and tendencies affecting profit, to which he has called our attention, are exactly the influences and tendencies which must affect the "reward of risk," and to have pointed out to us, if they exist, such influences and tendencies as affect these forms of income differently, and which will therefore serve in differentiating the one from the other?

Freight rates all int., would

Enterprise is then entitled to a standing in the theory of economics at least alongside land, labor, and capital. It is attended, however, by one peculiarity, which may perhaps be regarded as taking it out of their class, *but by placing it above them* in a class by itself. It is the directive, or governing, force, to which all the other industrial forces are subservient. Land, labor, and capital are but tools in the hands of enterprise. They can each of them exact a specified and predetermined part of the product from enterprise, but only by making themselves subservient to the commands of enterprise. It is the enterpriser alone who decides upon the direction which labor shall take and the form which capital shall take; and he decides primarily with an exclusive view to his own interest, and only secondarily with any consideration for theirs. He is forced, of course, to allow them a sufficient part of the product to keep up their efficiency as his tools; but he will never do anything which will lead to an increase of rent, wages, or interest, unless an increase of his reward is also involved.* So far, then, from its being improbable, as Mr. Haynes fears, that the recognition and proper classification of enterprise will be fruitful in economics, it can be confidently asserted that it is only from the standpoint of the enterpriser that a truly proportioned survey of the economic field can be obtained, because we cannot arrive at any satisfactory comprehension of the interaction of industrial forces until we have obtained an understanding of the initial force that sets them all in motion.

Returning now to the subject of insurance, which re-

*Thus, if a new process were proposed to an enterpriser, by means of which he could obtain the same product with the labor of 51 men at $2 which he was producing by the labor of 100 men at $1 per day, he would refuse to adopt it, because it would entail a loss to him of $2 per day, notwithstanding the fact that the adoption of the process would result in addition to gross wages of whatever the 49 discharged men could earn in other occupations. Supposing they could secure equally good wages elsewhere, this would mean a gain to the world of $47 per day, less the cost of educating 51 men worth $1 per day into $2 per day men.

quires further analysis, I would say that, so far from being a synonym for "reward of risk," as it is tacitly assumed to be by most writers, it is really its antithesis. To the party who pays a specific sum to free himself from a risk, insurance is not the equivalent of what would have been his reward for undergoing the risk. It is what is paid for avoiding the risk by transferring it to the shoulders of another. Nor does the second party, in accepting the premium of insurance, which Professor Clark speaks of as "the offset of the risk," receive it as his reward for the assumption of the risk. His real reward is to be found, not in the amount of premium received, but in the difference between that amount and the losses consequent upon assuming the risk; and in any individual case the reward may be therefore a negative one. When similar business transactions are aggregated, however, the sum of the premiums will always exceed the sum of the losses; and, therefore, in any general treatment of the subject, we are justified in regarding the insurer's reward as a positive one, so long as we do not fall into the error of considering the premium of insurance received as the insurer's reward. His net reward, after his expenses and wages of management are deducted, is a pure profit or loss, because, although the selling price of the guarantee he has given is fixed and predetermined, what the guarantee will cost him can only be determined by the expiration of the risk. The *entrepreneur* ordinarily has his costs or most of them determined before his selling price; but the insurer (and the *entrepreneur*, also, who sells his goods before he makes them) has his selling price determined before his costs. This, however, makes no theoretical difference, as there is equally an undetermined residue, whether it is selling price or cost which is first determined.

When the capitalist gets 2 per cent. extra in his gross interest to induce him to make a hazardous loan, his real

gain is not this 2 per cent. received, unless it so happens that his loan is repaid at maturity. Taking all hazardous loans together, as we should do in a general treatment of the subject, we see that capitalists receive a predetermined pure net interest on their capital, and an indeterminate sum besides, to reward them for their risk; that is, really an undetermined difference between cost and selling price, which, according to all disputants, is the definition of profit. The inducement to make a hazardous loan is not the gross amount of the premium exacted, but the difference between that premium and the probability of loss. In other words, considered from the general point of view, gross interest, as the term is ordinarily used, is a composite sum composed of pure interest, recoupment of actual loss, and profit, the first being a predetermined sum and the two others also predetermined in their aggregate, but varying inversely, and, therefore, undetermined separately. The first and third only are income of the combined owner and risker of the capital loaned, whose income is clearly a composite one, composed of two clearly distinguishable elements, which are subject to two entirely different sets of influences and laws. To obtain the second part of this composite income, the owner of the capital has exercised the function of the enterpriser; and it is curious to observe, and confirmatory, also, of the position I am advocating, that he was only able to exact this premium over pure interest because individually he did not at the time come under the definition of the "capitalist as such." The "capitalist as such" cannot be the owner or possessor of capital. That is universally conceded to belong to the function of the "*entrepreneur* as such." What the "capitalist as such" possesses is simply a *claim* on capital which is actually in the possession of some other *entrepreneur*, or in his own actual possession as an *entrepreneur*, if he employs his capital himself.

But it is precisely because the lender has the actual possession of the property at the time the loan is made that he is able to exact a premium for the risk. It goes without saying that a man cannot risk what he does not own or control; and, as the actual possession of capital is an attribute of the *entrepreneur*, and not an attribute of the capitalist, it is the *entrepreneur* alone who can risk it.

Now it does not follow that any individual *entrepreneur* cannot insure some of the risks inseparable from the business in which he is engaged; but we should expect he would in each case reduce correspondingly, or nearly so, the reward for risk that would otherwise accrue to him. And this is just what happens. A premium of insurance becomes a cost to the one who pays it, and is always a deduction from the undetermined residue. But, while it is true that the actual risk is not at all lessened by being transferred, it is always transferred to broader shoulders, because the assumer's subjective valuation of the risk must always be lower than the subjective valuation of the insured, from which it follows that the selling price of the product will be correspondingly reduced by competition. Let us suppose that in a given enterprise the real risk of destruction by fire is 1 per cent. of the product. A fire would, however, be such a serious calamity to an individual *entrepreneur* that he would require 5 per cent. of the product to induce him to take the chance. When insurance companies offer to relieve him and his competitors, also, of this risk for 2 per cent. of the product, competition would soon reduce the selling price by 3 per cent., from which it clearly appears that a premium of insurance paid by an *entrepreneur* really represents only a part of the real cost of his insurance, as eventually the competition of other *entrepreneurs* will lead to a lowering of selling price. In the case just cited the *entrepreneur* would have gained, on the average, one year with another, an additional 4 per cent. profit and selling price

would have been 3 per cent. higher if fire risks were uninsurable.

Looking at the matter from the standpoint of the individual *entrepreneur*, it has been perceived that he can shift some of his risks by the payment of a sum agreed upon or predetermined, from which circumstances both Professor Clark and Mr. Haynes tacitly assume that all his risks could be so shifted without the abandonment of his special function. It would follow — as the aggregate of a number of predetermined sums must be itself a predetermined sum — that the cost of shifting the whole risk assumed by the *entrepreneur* must be considered a predetermined sum; and, as this cost is considered by them to be the reward of risk, the reward of risk cannot be a residue, but must be considered as a cost. We have already noticed the fallacy of regarding insurance as the reward of risk. But the argument contains another fallacy even more radical. It lies in the supposition that the *entrepreneur*, even in their definition of the term, can shift all his risks by means of insurance without entirely abdicating his special industrial function. The risk involved in his ownership of the product can only be terminated by his parting with the product,— an act which is the *finale* of any industrial transaction. This act completed, the undetermined residue is determined, the uncertain profit becomes realized and definite, and the *entrepreneur* has ceased to exercise his peculiar industrial function.

This brings us to the last division of our subject,— speculative risks, as they afford an example of a special case where the *entrepreneur* appears to insure his last risk, that of "selling price"; to insure, that is, the risk I have called an uninsurable one. I refer to the case of the miller of flour to which Professor Emery calls attention. It so happens that I am practically as well as theoretically familiar with operations on the Exchanges. Let

us consider, then, transactions in an important and typical commodity,— cotton.

Every conservative dealer sells "futures" against his purchases of actual cotton, and buys "futures" against his sales of actual cotton. It may seem to the uninitiated that such a sale of "futures" is a virtual insurance of "selling price" and such a purchase of "futures" a virtual insurance of "cost." And, to a certain extent, this is true. When the actual cotton is purchased for the purpose of delivering it on the "future contract" sold, there are, however, several elements of uncertainty yet uneliminated. The cotton may be damaged in transit; it may lose in weight; it may not grade as well as expected; it may be too long in transit to reach the market in time for delivery; the allowance for grade may vary before delivery; the carrying differences between the months may change; and so on. Usually, however, the cotton bought is not suitable for "contract delivery" which will entail additional uncertainties. It may, for instance, be of superior staple and character, which command a premium not allowed for on "contract deliveries," or it may have been bought with reference to a prospective customer for whose use it was especially fitted, and a premium paid for it on that account. In short, the circumstances other than the fluctuation of price on the Exchange which affect the selling price of a "hedged" lot of cotton are almost numberless. It is safe to assert that, as a matter of fact, not 10 per cent. of the actual cotton handled by New York dealers could be "delivered on contract" without loss. It is evident, therefore, that the risks influencing selling price are never wholly eliminated by the process of "hedging." Nevertheless, a great part of them are thus eliminated; and the consequence is that actual cotton is handled on a margin of profit so small that it often hardly exceeds a brokerage, and yet the business yields, perhaps, the average return on capital. The reason is that with

the decrease of risk and of profit on each transaction there takes place a corresponding increase in the number of transactions possible with the same amount of the dealer's own capital. It is not an unheard of thing for the cotton market to advance 100 per cent. or to decline 50 per cent. from the opening price within a year. The merchant who should embark his whole capital in such a variable commodity would be altogether too venturesome. Unless the expectation of average gain was very great, the moderately prudent man would not engage in the business at all, or, if he did, he would invest only such small part of his funds as he could spare without much inconvenience. On the other hand, when cotton is "hedged" on the Exchange, dealers can safely carry cotton to several times the amount of their capital. Hedged cotton is such a good security that borrowing on it is safe for both borrower and lender, because the limits of the variation in the "uncertain residue" when it is finally determined will be found to be unusually near together. It is a very rare thing for actual cottons bought to be carried and sold again on the Exchange, to net a loss of over 2 per cent. or to show a profit of over 5 per cent.; and, perhaps, the average dealer in "hedged" cotton would be fairly well satisfied if his purchases realized him a net average gain of 2 to 3 per cent., whereas, if "options" were prohibited, as is desired by our Populist friends, dealers would have to obtain on the average from 6 to 10 per cent. of the selling price, to yield them the same percentage of return on their capital and the increased reward which the greater risk would inevitably result in.

The middleman who does not hedge his cotton has his average remuneration fixed by his competitor who does hedge; and he can therefore get absolutely nothing in the long run for retaining the risks he might shift by hedging. Of course, during an advancing market he

makes enormous profits; but he suffers corresponding losses when the market declines. If he attempts to charge for this additional risk, his prices will be higher than the prices at which his more conservative competitors are glad to sell. The operations of the cotton exchanges, therefore, reduce the aggregate gains of middlemen by perhaps 50 per cent., the benefit going, of course, eventually to the final consumers of cotton goods. The individual middleman loses nothing by this process, as he is able with the same capital to do enough more business to offset his reduced gain on each separate transaction. What the class loses is in its numbers: there will be found to be only half as many of them as before.

Now we find in the cotton speculator a person who performs a real and very valuable industrial service. Is he an *entrepreneur?* He certainly assumes a considerable part of the risk of variation in the selling price of a great commodity,—a risk which, when assumed by dealers in other commodities, yields them, on the average, a very substantial income of profit. Why does not the profit, or, at least, a part of it, as in other cases of insurance, follow the risk? And how can it be demonstrated that it does not?

The mere speculator in cotton is not an *entrepreneur* so long as he remains a mere speculator, because he has not, in buying his "futures," acquired any ownership in any actual cotton, but only a claim to have cotton delivered to him at a certain time at a certain price. When such a delivery is made, he becomes an *entrepreneur*, and is sure to realize a gain or suffer a loss independent of his gain or loss due to fluctuations of the market. But, unless his "future contract" terminates in the transfer of real cotton to him, he lacks the ownership which would enable him to obtain a profit,—a profit which would appear in the price paid by the consumer. But the fact that speculators in cotton as a class get nothing in the

long run as a reward for running the risks they assume can also be mathematically demonstrated. For every sale on the Exchange there is a corresponding purchase. The long and the short side are always equal to a bale. Some of the sales, however, are against cottons held by dealers or against cottons the planter has or expects to obtain from his growing crop. Occasionally, also, a purchase of cotton "futures" is made by a spinner as a hedge against a sale of manufactured goods, to make which will require more cotton than he cares to buy at the moment. There is always, however, a large balance of hedging sales over hedging purchases. Consequently, when the market advances, speculators as a class do make money; and holders of hedged cottons forego an equal amount of gain, which they would have secured if they had acted less conservatively. But, when the market declines, the process is reversed; and the speculators lose money to just the amount that the holders of hedged cottons save. As, in the long run, rises in price must exactly equal declines, speculators as a class neither make nor lose by their operations,* except, of course, the loss of the expenses they incur in the conduct of their speculations, such as for office rent, clerk hire, and brokerages. There is, of course, a class of individuals who acquire fortunes, and sometimes very large ones, by speculation on the Exchanges, whose success is by no means due to luck or good fortune, but to sound judgment, pluck, and wide knowledge both of men and affairs. Their gains are at the expense of less able and less well-informed venturers. If all speculators were equally well equipped, none of them could make any money except as a matter of pure luck, as then the price of cotton on the floor of the

* This is strictly true only under the supposition that on the average as much cotton is "hedged against" in rising as in falling markets. As a matter of fact, as large stocks depress prices, more cotton is "hedged against" in falling markets, so that on the whole mere speculators must lose more than they gain; but the percentage of loss on their total operations is trifling.

Exchange would be exactly what it really ought to be, and would vary only on the occurrence of circumstances that no one could have foreseen.

Now I think I have made it evident that Dr. Wood was mistaken in his remarks before the American Economic Association when he assumed that a theory of profit must account for the gains of speculators on the Cotton and Produce Exchanges; also, that President Hadley was laboring under a misapprehension — very pardonable in a professional man — when he implied that these speculators performed the service of "carrying goods over from time to time." We have seen that they never possess the ownership which would render that possible. To "carry goods over from time to time" is, of course, a function of the *entrepreneur*, or enterpriser; and, whether the carrier is a manufacturer, a jobber, a wholesaler, or a retailer, he is exercising a useful industrial function, for which he rightly receives a composite income of interest, wages of management, and profit. He is not a speculator at all, in any proper sense of the word, and should not be spoken of as such except in that loose use of the term which signifies an over-venturesome person. The forestaller, however, although no more a speculator than the jobber, stands on a little different footing; that is, he is a jobber who seeks, by "cornering the market," to add a monopoly increment to his legitimate profit.

The answer, then, to the inquiry of Professor Emery contained in the able paper which he read before the American Economic Asssociation is that the speculator has no place at all in the theory of distribution, or, what would be a better name for it, in the theory of productive distribution. That theory, as I understand it, has only to do with the division of the product among those who contribute to its creation. It is concerned only with industrial incomes, and does not consider what the recipients of income do with it, except, perhaps, so far as their ex-

penditure reacts upon their ability to continue their productive activity. If these recipients elect to give away, gamble away, or spend foolishly, what they have earned and received of rent, wages, interest, or profit, the theory of distribution does not have to accommodate itself to the explanation of their actions in so doing.

We have now, I think, attained a position from which we can clearly discriminate between the three classes of risk-takers,— enterprisers, speculators, and gamblers. All of them are actuated by the hope of gain, but differ in their grounds for expecting or hoping for gain. The *entrepreneur*, who is the only assumer of industrial or productive risks, when considering a risk, computes as well as he can the actual probability of loss. He then forms a subjective valuation of the risk, which is, of course, considerably greater than the actual risk. The difference between his actuarial and his subjective valuation serves as the minimum limit of the expectation of profit which will induce him to assume the risk. He then secures from the person who will be relieved by his assumption of the risk as much as he can for assuming it, the maximum limit being, of course, that person's subjective valuation of the risk, which must in all cases be greater than his own, or no transaction results. The competition of enterprisers among themselves results, of course, usually in the enterpriser getting but little more than his own subjective valuation; but a little more he does always get in the long run. The essential point, however, is that the enterpriser performs a service for which he expects to receive a reward,— necessarily, from the circumstance of the case, uncertain in its amount, or, in other words, a true residue.

The speculator, on the other hand, does not render, or rather does not mean to render, any service to anybody. The fact that a speculator on the Cotton or Produce Exchange does render a service to society through the party he relieves of the risk is, as we have seen, only in-

cidental. The speculator on the Stock Exchange, whose operations are otherwise similar to his, relieves no one of the risk of what the selling price of the product will be, as the subject matter of his speculations is not products but aggregations of capital that produce products. All that the pure speculator has in mind, when he assumes a risk, is to back his own opinion. He believes that the common judgment of the trade about the real value of cotton or wheat or stocks, as expressed in the prices ruling on the Exchange, is wrong, just as he may believe that a certain horse may have a better chance to win a race than is expressed by the going odds. Some of these men are correct in their estimate of themselves: their judgment of cotton, wheat, stocks, or horses, is better than that of the average man venturing in these matters. These men win largely and steadily, but it is only because they excel their fellow-speculators. If the average was raised to their level, they would have no advantage in speculation; and they would cease to win with any approach to regularity, and in the long run would neither gain nor lose by their ventures. Speculation is, therefore, merely a distributive force, and cannot be brought by analysis within theories of the productive forces.

The case of the gambler differs from that of the speculator only in this: that his subjective valuation of a risk is a negative quantity. The excitement of risk makes it, to the gambler, a good in itself, so that, when he believes the chance of winning or losing to be even, he likes to take the chance when opportunity offers; and when he cannot find an even chance to bet on, without putting himself to too much trouble, he will play faro or some similar game in which he knows that the chances are against him.

It is curious to observe, however, that the keeper of the faro bank, or "banker," who is often spoken of as the gambler *par excellence*, is not a gambler at all. And

the popular diction recognizes this in another common form of words. This man is called a "professional gambler," a "man whose business is gambling." And the popular intuition is correct. The "professional gambler" is a business man, an *entrepreneur*, an enterpriser. He assumes a risk, and looks to an undetermined residue for his reward. In assuming the risk, he performs a service by affording real gamblers an opportunity to gratify their passion for excitement and dissipation. The fact that the service is disreputable does not affect its economic character.

So long as the above distinctions between the enterpriser, the speculator, and the gambler, are not clearly apprehended (and that they are not yet so apprehended by our leading economists appears very plainly in the discussion which followed Professor Emery's paper at the meeting of the American Economic Association), it is not to be wondered at that economists shrink from allowing enterprise a coequal place alongside land, labor, and capital. This natural reluctance, together with the almost universal custom of regarding insurance, because a definite sum paid for assuming risk, as therefore itself the reward for risk, which reward could not on that account be an undetermined residue; and the neglect to subject the term "co-ordination" to the careful analysis which could not have failed to show that "co-ordinating" is only a kind of labor, and not entitled, therefore, to any such reward as a profit, because profit and wages are fundamentally distinct,— these considerations appear to me to afford the probable explanation why the Risk Theory of Profit has met with the cool and half-hearted reception which has so far been its fate, and have led me to ask in this article a reconsideration of the evidence.

FREDERICK B. HAWLEY.

# THE CAPITALIZATION OF PUBLIC-SERVICE CORPORATIONS.

EXAMINATION of the statutes and the judicial decisions of our American Commonwealths reveals, aside from those cases where no definite policy has ever been entertained, two distinct theories as to the proper basis for capitalization of corporations. One is that the total amount of stock and bonds issued should stand in a definite relation to the actual investment of capital in the enterprise.* The other is that capitalization should be based upon earning capacity alone, let the source of such revenue power be what it may,—property, patents, franchises, or mere good will. Under the first policy, an enterprise to be capitalized at $1,000,000 must represent that sum of money paid in at some time, either as cash or as an equivalent in tangible property. This is the policy consistently followed in Massachusetts, and somewhat less stringently perhaps in Connecticut.† Five years ago a reform in this direction was seriously proposed for New York, although little seems to have been actually accomplished.‡

The second policy presupposes that, at a market rate of 6 per cent., an earning capacity of $60,000 per year is properly capitalizable at $1,000,000, be the actual investment what it may. The franchise or the good will, it is contended, can be sold for valuable consideration. In the eyes of the law it is property during the period of its life

* For the purposes of this article both stock and bonds are alike classed as capital. *Cf.* the reasoning in *Statistics of Railways in the United States*, 1888, p. 13. The inclusion of floating debt is variously viewed in different States.

† In Connecticut, until recently, special legislation, especially in the case of street railway corporations, prevailed. For this reason the general laws mean but little, save for those traction companies organized since 1893.

‡ A special committee of the Assembly reported in favor of limiting capitalization to one and one-half times the cost of construction.

at all events.* Even in Massachusetts it is considered tangible enough to be attachable for debt.† This second policy allows the inclusion of the franchise value — that is to say, the *surplus* earning capacity over a normal return upon the investment — in the nominal capitalization. And the limit of issues of stock and bonds is fixed only by the amount of such actual or estimated earnings, as the case may be. Thus the State Commission in 1899 provided for allowance to the street railway company of Detroit of $8,000,000 for its plant and of $8,500,000 for its franchise, this latter being merely the capitalization of the surplus earnings.‡ Among our American Commonwealths the most flagrant examples of unlimited capitalization occur under the laws of West Virginia, Delaware, and New Jersey. In the first of these, no limitation whatever is placed upon stock issues beyond payment of a small registration tax. The Delaware constitution follows the usual statutory enactment of other States, prohibiting all issues of stock except for money paid, labor done, or property actually received. The absence of all administrative control, and the apparent failure of the State courts to rule adversely, naturally renders this law of no effect. New Jersey has met the issue adroitly.§ Its Corporation Act, as revised in 1896, recites that "nothing but money shall be considered as payment of any part of the capital stock"; except that any corporation may purchase property by the issue of securities, in which case "the judgment of the directors as to the value

* Numerous decisions have established this clearly, among them primarily that of the Monongahela Bridge Company, 148 *U. S.* 312; and 144 *Pa. St.* 365, in case of the Mifflin Bridge Company; and recently in *Washburn* v. *National Wall Paper Company*, 81 *Fed. Rep.* 17.

† *Public Statutes*, chap. 105, 30–38. *Cf.* the case of Brokaw Brothers, establishing that in private business good will — that is to say, capitalized *future* prospects — is not taxable. *Financial Chronicle*, lxix. (1899) p. 1086.

‡ *Street Railway Journal*, 1899, pp. 477–483.

§ *The Chicago Banker*, i., 1889, pp. 407–411, gives interesting data on the history of New Jersey legislation.

of the property purchased shall be conclusive." The status of Maine, formerly a refuge for over-capitalized companies, has been recently reversed without modification of its statutes through a decision of its Supreme Court. This has, in effect, held stockholders liable as against a judgment creditor to the amount of the balance of the capital stock at par, over and above the value of the tangible property.* This decision, based upon the theory that such stock is not yet fully paid up, has already acted as a salutary deterrent in many cases.

The best examples of the effect of the unrestrictive policy is to be found in the industrial combinations organized in the United States during the last few years. Excluding some of the peculiarly speculative ones, thirty-nine of the trusts reporting to the expert of the Industrial Commission indicate that their property owned is worth, even at prevailing high market prices, but 64.42 per cent. of their nominal capitalization.† It is rare that the preferred stock and bonds do not fully equal the value of the plant, stock and cash on hand; leaving the huge mass of common stock to represent good will or estimated earning capacity. Under British company law much the same conditions are coming to prevail. Thus the English Sewing Cotton Company's capital is atmospheric to the extent of one quarter, that of the Cotton and Wool Dyers' Association being more than half fictitious.‡ That similar inflation in the case of our railroads was formerly the rule is equally well known, honorable exception being made of a few companies, such as the Lake Shore, Chicago & Alton and the Old Colony in Massachusetts.§ It is prob-

* *Libby* v. *Tobey*, 19 *Atl. Rep.* 904.

† *Bulletin United States Department of Labor*, No. 29 (1900), p. 671. *Cf.* the cases of the United States Leather Company and the Federal Steel Company. In both the preferred stock bought the plants, while the remainder went mainly to commissions and promoters' profits. *Bradstreet's*, 1899, pp. 436 and 531.

‡ *Economist* (London), 1900, p. 532.

§ *Financial Chronicle*, lvii. p. 203; lx. p. 352; and lxii. pp. 347 and 480.

able, however, that in the case of many railroads these abuses have of late been somewhat mitigated.* Much of the water has been expunged from the poorer roads through rigid reorganization in periods of depression, such as 1893–98. And, in the case of the stronger ones, the properties have been improved from surplus earnings, so as to fill out their once too generous allotments of capital. This does not seem to be true to an equal degree in England, where over-capitalization of the railroads still seems to be on the increase, owing to their peculiar methods of finance, of which we shall have occasion to speak later.†

Two arguments in favor of permission to capitalize earning capacity or future prospects, rather than mere investment, may justly be advanced. One is that in no other way can the risks incident to a novel enterprise, repelling timid capital, be overweighted by possible profits through premiums in the form of securities purchasable at a discount. This argument, however, presupposes risk,—a condition entirely absent from many of the public-service companies, even at the outset of their careers. It also assumes that the persons who take the risk are the ones who ultimately reap the rewards. This, also, is a fallacy in too many cases; since the capital really risked in the plant is often raised on bonds, which receive but a moderate return, keeping them near par at all times; while the speculative profits come to the shareholders who acquire the stock for little or who take it for nothing as a reward for promotion.‡ The second argument has somewhat more force. Mere plant or dead property becomes profitable only through operation. This requires a quick capital in the form of credit or of cash. Without such work-

* Cf. *The Chicago Banker*, v. (1900) pp. 335–339.

† Woodlock, in the *Engineering Magazine*, xi. p. 238. *Cf.* also *Financial Chronicle*, lv. (1892) p. 1061, comparing the Pennsylvania Railroad and the Midland.

‡ On the promotion of companies see a note by the present writer in *Journal of Political Economy*, viii. p. 535.

ing capital, the plant not being a "going" concern loses much of its value.* Consequently, it is urged, capital in excess of the value of the plant may rightfully be created for this purpose, by the sale of stock or bonds. The importance of this argument in the case of private companies cannot be denied. Recent evidence tends to show that an amount varying from 15 to 175 per cent. of the value of the plant is in most of the industrial organizations devoted to working capital.† In fact, one of the powerful incentives to the formation of trusts is the desire of the individual producers to be relieved from the strain of dependence upon the banks for their quick capital. A difference between the public-service company and a private corporation is, however, discoverable in this: that, as a rule, the possession of a valuable franchise, attachable for debt, as we have seen, is sufficient security to enable working capital to be raised by the ordinary means.

The evils incident to allowing a wide divergence in either direction between actual investment and nominal capitalization are quite apparent. Among these, as applied to public-service companies, the most important of course is that all relationship between the charges to the public for service and the net profits upon the real capital concerned is obscured. The actual return upon investment can never be precisely determined without an appraisal of the property. And, inasmuch as such an inventory subverts the primary purpose of over-capitalization, it is a difficult matter to have it authoritatively taken. The case of the Lynn and Boston Street Railway Company, now pending in Massachusetts, is in point. Having been manipulated under exemption from general statutes to a

* This point was covered in the recent Newburyport Water-works award, to be discussed *infra*.

† *Bulletin United States Department of Labor*, No. 29 (1900), p. 672. *Bradstreet's*, 1899, p. 739, cites two trusts handicapped from failure to procure sufficient working capital in this way. See also *Papers* and *Proceedings American Economic Association*, 1900, p. 150.

high degree of inflation through successive consolidations, its directorate now bitterly opposes the attempt of the Railroad Commissioners to ascertain the real basis upon which its securities rest. This suggests a second fundamental evil of over-capitalization, the absence of all adequate security,—first, for the creditor, and, secondly, for the shareholders,—especially in any terminable enterprise. As to the first of these, it is obvious that borrowing capacity, while dependent upon current revenue for its interest, must ultimately rest upon the attachable property for final security. And the maintenance intact of this capital — too often taken as synonymous with property — is one of the leading objects of the law regulating limited liability.* As for the possible losses of shareholders in an over-capitalized concern at its dissolution, the danger in most of our public-service companies would seem to be remote. For the franchise grants to the older companies being perpetual, and the growth of population steadily enhancing profits, dissolution can never mean more than a resale at high prices or merger in a succeeding corporation. Only under the newer forms of terminable franchise may such loss probably occur to the shareholders. And it is to be presumed that they will safeguard their interests, or at least should be compelled to do so, by a policy of amortization and of writing off for depreciation.†

The rigid policy of Massachusetts respecting its public service corporations is in large measure an outgrowth of

* The inadequacy of the law to prevent dividends paid at the expense of capital, especially in England, is well described in the *Economic Journal*, x. (1900) p. 9; and the *Economist*, 1888, p. 407, and 1890, p. 919. Dicksee, *Auditing*, is also very good. Where the law permits the bonding of an enterprise up to the full amount of the capital stock, security for this indebtedness can only be attained by keeping capitalization well within the value of tangible plant. The stricter Connecticut and Nebraska laws, limiting bonded debt to one-half and two-thirds of the capital stock respectively, would seem, from the creditor's view-point alone, to permit of a greater latitude in this respect.

† On the practice of English companies, liable to purchase by the municipalities, see *Economist*, 1898, p. 349.

its hereditary policy towards the domestic railroad companies, somewhat halting at first, but afterwards clearly defined by its eminent board of Railroad Commissioners. The corporate evil of railroad stock issued merely as a bonus to stimulate the sale of bonds which are in themselves sufficient to defray all expenses of construction has never been tolerated. Its railroads have to a greater extent than in any other State, perhaps, been built by sales of stock rather than of bonds, such stock being marketed at a respectable percentage of its face value. The result has inevitably been that, with the assured success of the enterprise, the stock has risen far above par instead merely, as when issued as a bonus to bond purchasers, of rising towards par. The consequence has been that, with prosperous roads like the Boston & Albany, frequent applications arise for right to issue new stock to keep pace with growing value of the plant. And the resultant anti-stock-watering agitation has kept the matter before the public. The focus of attention of late years, however, has shifted to the gas, electric, and street railway companies. The most explicit statement of policy, crystallized into law, is found in the anti-stock-watering laws of 1894 and 1896.*

The effect of the conservative policy in Massachusetts appears in the accompanying table representing the capital stock and funded debt of various street railway companies. In no type of public service corporations have the evils of over-capitalization been pushed to greater excess than in the case of this class of corporations. Several causes seem to have co-operated to bring about this result. In almost all our cities, profits dependent upon gratuitous franchise grants have almost in a night become so large as to require concealment. Then again, the progress of the industry has been so rapid since the first electric street road was operated in Richmond, little

* Acts of 1894, chaps. 350, 450, 452, 472; and of 1896, chap. 473.

more than a decade ago, that revolutionary changes in equipment have been necessary. These, in turn, have invited financial manipulation at each turn-over and replacement, just as we know that discoveries of new means of gas manufacture have opened the way to inflation.* And, finally, the rapid growth of urban centres has in itself compelled a great extension of track and of service leading to pooling and consolidation, with all their attendant opportunities. We may instance the Chicago street railways as a case in point, with their more than doubled mileage from 1886 to 1896, each mile of track having increased, moreover, in average capitalization from $66,000 to $126,000.†

CAPITALIZATION PER MILE OF TRACK, 1899.

STOCK AND FUNDED DEBT.

(*Street Railway Journal*, October, 1899.)

| | |
|---|---|
| London street railways | $79,632 |
| New York street railways | 201,381 |
| New York elevated railways | 662,520 |
| Chicago street railways | 118,334 |
| Chicago elevated railways | 873,231 |
| Berlin street railways | 74,708 |
| Brooklyn street railways | 119,072 |
| Philadelphia street railways | 265,510 |
| Liverpool street railways | 94,494 |
| Eastern Massachusetts street railways | 61,972 |
| Boston street railways | 100,615 |
| Glasgow street railways | 54,866 |
| St. Louis street railways | 306,644 |
| Cleveland street railways | 96,585 |

(*Massachusetts Railroad Commissioners*, 1898.)

| | |
|---|---|
| Massachusetts street railways | $46,600 |
| New England street railways | 49,500 |
| New York State street railways | 177,800 |
| Pennsylvania street railways | 128,200 |
| United States street railways | 94,100 |
| Great Britain street railways | 47,000 |

* *Quarterly Journal of Economics*, xiv. (1900) pp. 509–536.

† *Illinois Bureau of Labor Statistics*, 1896, on "Franchises and Taxation," p. 48.

(*Eleventh Report Statistics of Railways.*)

| | |
|---|---|
| United States steam railroads . . . . . . . . . . . . . . | $60,000 |
| New England States steam railroads . . . . . . . . . . . | 60,000 |
| Middle Atlantic States steam railroads . . . . . . . . . . | 111,000 |
| Southern States steam railroads . . . . . . . . . . . . . | 45,000 |

Scanning this table, the relatively low capitalization of the Massachusetts and New England companies stands forth clearly, especially in contrast with those of New York and Pennsylvania. St. Louis heads the list, with the extreme case of a capitalization averaging five times that of the steam railroads of the United States.* Philadelphia and New York are not far behind in this regard.† Nor can it be admitted that the service is less efficient in Massachusetts than in either of the other cases. Even for New York State as a whole, with a goodly proportion of suburban roads, which, of course, lower the average, the capitalization is three times that of the steam roads of the country at large, and 50 per cent. greater than that of the railroads in the Middle Atlantic States.‡ It is probable that the average for Massachusetts and New England is somewhat depressed by a relatively greater proportion of purely suburban lines, built at minimum cost. The same factor of low cost also explains in some measure the relatively low capitalization of the European roads. Many are still operated by horse-power or by light electric service, so that comparison with our own country is largely vitiated thereby.

That the policy of Massachusetts in attempting to keep capitalization down to actual investment has been fairly successful is attested also by a second table, which com-

* See *Report of the Missouri Commissioner of Labor*, 1896, for history of this company.

† See the extended tables of financial characteristics in the *Street Railway Journal*, October, 1899, pp. 680-684, as also the *Report of Special Committee of the New York Assembly upon Municipal Ownership of Railroads*, 1896.

‡ Cf. *Report of the Massachusetts Committee on Relations between Cities and Towns and Street Railway Companies*, 1898, p. 37.

pares for Massachusetts the sworn returns of cost with those of capitalization.

COST AND CAPITAL INVESTMENT PER MILE.

(*Massachusetts Railroad Commissioners*, 1897.)

| | Construction. | Equipment. | Real Estate. | Total. | Capital. |
|---|---|---|---|---|---|
| Massachusetts, 1887 . | $17,600 | $8,300 | $9,700 | $35,600 | $32,700 |
| " 1893 . | 26,800 | 11,700 | 15,500 | 54,000 | 53,400 |
| " 1896 . | 23,400 | 9,800 | 12,800 | 46,000 | 46,400 |
| West End Co., 1896 . | $56,600 | | 39,800 | 96,400 | 100,700 |
| Worcester Co., 1896 . | 41,500 | | 6,500 | 48,000 | 45,000 |
| Springfield . . . . | 25,000 | | 8,800 | 33,500 | 31,000 |
| Holyoke . . . . . | 23,700 | | 9,400 | 33,000 | 31,000 |

The agreement between the last two columns, for a few companies chosen from a long list, as typical of varying conditions of service, is as close as need be. Discrepancies, where they occur, tend rather to excess of tangible assets over capital liabilities than the reverse.* Assuming the maximum cost of a street railway adapted for heavy service, and exclusive of real estate holdings, to be not far from $65,000 per mile, the immense over-capitalization of surface roads in other parts of the country becomes at once apparent.

The regulation of the capitalization of gas and electric light companies in Massachusetts has not been less effective in this direction, dishonorable exception being made lately of the city of Boston. Judging by the latest returns, the majority of the larger companies show a surplus of tangible assets over stock and bonds of from one-third to one-half of their total capital. Thus the Cambridge Company, capitalized at $700,000, has a surplus of $358,000; Fall River, capitalized at $450,000, surplus $160,000; Lowell, capital $500,000, surplus $334,000;

*Certain cases occur, as of the West End Company, now leased to the Boston Elevated Railroad. Cf. *Report Massachusetts Railroad Commissioners*, 1898, pp. 140–155. The first lease proposition was revoked because the capitalization was $26,340,000, while the plant was worth but $25,600,000.

and so on.* The old Boston Gas Company, capitalized at $2,500,000, actually paid taxes upon $4,129,000, so completely was it swamped by a huge surplus.† The aggregate balance sheets of all companies in the State in 1899 showed a total capital of $24,878,000, with a surplus of assets over and above this of $8,115,000, upwards of a million dollars being charged to reserves and depreciation at the same time.‡ In fact, exclusive of Boston, the main problem for the gas companies was as to the proper disposition to be made of these surpluses, as we shall see. The contrast with the situation in New York is adequately illustrated by the facts in that city in 1885, when, with a property worth not over $20,000,000, the Consolidated Gas Company was capitalized at $45,000,000.§

Assuming that the conservative policy of strict limitation of capitalization, as exemplified in Massachusetts, is the safer one in the case of public-service corporations, we are at once confronted by a perplexing question: What should be the standard by which the proper volume of stock and bonds is to be measured? A number of possible ones suggest themselves. Among these, we may profitably consider, in turn: first, the total original cost or actual investment from the outset; secondly, the reproduction cost of the plant under present conditions; thirdly, the "structural value,"—value, that is to say, for service and wear, irrespective always of earning capacity; and, in the fourth place, market value, or the price obtainable at open sale. To show how widely different these may be, we may cite the leading case of the Interstate

* From *Investigation of Boston Gas Companies*, Committee on Manufactures, March, 1900, tables presented by G. W. Anderson. (Pamphlet.)

† *Supplement Annals of American Academy of Political Science*, May, 1900, p. 41.

‡ *Fifteenth Report Gas and Electric Light Commissioners*, 1900, p. 97.

§ *Report Special Senate Committee to investigate the Supply of Gas in New York*, 1885, p. 12.

Consolidated Railroad Company.* Operating both in Rhode Island and Massachusetts, it had obtained a charter from the former State, with the right to issue stock and bonds to the amount of $650,000. It then applied to the Railroad Commission for authority to issue this amount under the Massachusetts charter as well. The original capitalization of a defunct predecessor had been $875,000, of which only about $470,000 represented the actual investment, the remainder being water. Owing to the fall in prices of electrical equipment, it was established that the plant could be duplicated for about $400,000. Its present structural value was estimated to be not over $255,000, while the price paid for it at public auction by its then present holders was $152,000. Excluding the possible basis of capitalization upon earning capacity, which ranged upon estimate from nothing to $900,000; which of these other standards, between $470,000 and $152,000, ought rightly to be applied? This particular case happened to be simplified by a late change of ownership at forced sale, through which the actual capital invested in the enterprise by the petitioners was known. This being shown, with immediate improvements projected, to amount to $317,197, the board authorized a capitalization of $317,200 in conformity thereto. Had the case, as in ordinary practice, been one of petition for new capitalization by the original company, the decision would have been less easy.

It would seem as if, in an enterprise still in the hands of its projectors, *the original and total cost* might be a fair criterion for capitalization. Such would seem to have been the norm first adopted in Massachusetts. "As the established rule of our law, the capital stock of every business corporation must represent the cash actually contributed by its stockholders,—no more and no less." † Or,

* *Report Massachusetts Railroad Commissioners*, 1896, pp. 165–172.

† Ibid., p. 171.

quoting from a private letter from one of the Railroad Commissioners in Connecticut, "The capital in an enterprise is the amount put into it at the time when the enterprise was initiated; although it would cost less to embark in the same undertaking to-day." The latest revision of German company law follows this policy also, in allowing all property to be taken at cost price, minus depreciation, notwithstanding the fact that its actual value is less.* There are many valid objections to this rule. The State cannot permit the capitalization of dishonesty, of extravagance, or of incompetence; nor can it permit the burden of obsolete industrial processes or administration to be laid upon future generations. Capital may have been needlessly wasted, as in the case of many Western railroads, through construction companies,† or as in the recent scandalous electricalization of the Third Avenue Railroad in New York City. Legitimate expenses of incorporation may be very heavy, as in England; or large expenditures for entirely improper purposes, as in "kissing" bills through legislatures, may have been made. The money may have been actually expended by the promoters, as Jacob Sharp undoubtedly paid many hundred thousand dollars in 1883 for the franchise of the Broadway Surface Railroad Company.‡ This represents real capital invested. Had it been legitimately spent in openly bidding for a franchise, its capitalization might have ensued without question. Or, again, consolidation of various companies, necessary for unity and efficiency of service, may perhaps be attainable only through purchase or control of contributory or supplemental systems. These are to be

* *Economic Journal*, x. p. 13.

† The device of the construction company is still utilized for evasion of strict capitalization laws. Two companies have been privately cited to me in which the actual cost of installation to the construction companies, which were identical in *personnel* with the parent corporation, were $62,000 and $211,000 respectively. The contracts for this work were let, however, at $100,000 and $500,000.

‡ An excellent account is given in *Municipal Affairs*, iv. (1900) pp. 139 *et seq.*

had only at an exorbitant price. Such, for example, has been the case in most of our large cities, where fancy prices have been paid for local companies; such prices being far above any actual franchise value based upon future earnings. An earnest advocate of street railway interests naïvely observes in extenuation of the admitted fact of over-capitalization that the present high valuation is probably not in excess of the cost of equipment *plus* the cost at the present time of purchasing the rights of way.* Such expenditures may be the necessary forerunner of successful operation. Shall a return upon them as capital stock be denied? This cannot be done so long as the criterion of original investment obtains.

These fundamental objections against original investment as a basis for capitalization have led to general acceptance of the *cost of present reproduction* in its place. This is the norm usually accepted by judicial appraisers, as in the recent case, still pending in the courts, concerning purchase by the city in 1895 of the Newburyport Water-works.† It seems to have been adopted also in appraisal of the Milwaukee street railroads in 1898 as well as in Detroit.‡ It is the one recognized by the Massachusetts Railroad Commissioners in their regulation of capitalization.§ The Gas and Electric Light Commissioners in the same State also adhere to it closely in fixing the price of product. This is plainly evidenced in the case of the Brockton Gas Company in 1895. The board ordered a re-

* *Street Railway Journal*, 1897, p. 212. German company law applies well here in prohibiting the charge to assets of any item above cost price. Thus, if it cost nothing, it must not be allowed to swell the capital account.

† Bill of Complaint, in case of *Newburyport Water Co.* v. *Newburyport*, United States Circuit Court, District of Massachusetts, No. 924, p. 12. Also raised in the case of Mifflin Bridge Company, *Pa. St.* 144, p. 36, where, the bridge being swept away while the case was pending, the cost of its duplication became involved.

‡ *Street Railway Journal*, 1898, p. 397, and 1899, p. 480.

§ *Cf.*, for example, the West End Street Railway lease in Boston. *Massachusetts Railroad Commissioners*, 1898, pp. 140–155.

duction of price, maintaining that the company was justified in earning dividends only upon the cost of duplicating the plant. In the words of the decision, "The profits of companies supplying this kind of public service must compare favorably with those which a new company might need to pay a fair dividend when fully equipped to render the same service." * Such is the apparent intention of the laws in most States which make any attempt at regulation of this sort.†

It is apparent at once that this substitution of duplication price for original investment shifts the base entirely; inasmuch as prime cost bears no necessary relation whatever to present value, even supposing the investment to have been wisely and properly made. Recent as the trusts are, twenty-four of those reporting to the Industrial Commission state the original cost of their plants to amount to 73.22 per cent. of their nominal capitalization, while the cost of reproduction amounted to only 64.42 per cent. of the same.‡ The divergence between the two is of course most notable in the case of those businesses in which methods and processes are rapidly changing. The electrical industries, characterized by a rapid fall in the costs of equipment since 1893, will serve as examples. Electric motors, costing perhaps $2,850 in 1891, may be replaced to-day in greatly improved type for perhaps one-third of that price. Instances may be cited where the entire cost of a suburban street railway has decreased from $35,500 in 1892 to $22,600 per mile in 1899.§ Equally great have been the changes in cost of plant to the electric lighting companies, entailing serious problems of regulation of capitalization and of price for the Massa-

* *Eleventh Annual Report*, p. 14, cited by J. H. Gray in *Quarterly Journal of Economics*, xiv. p. 531.

† Cf. *Bulletin Department of Labor*, No. 29 (1900), p. 670.

‡ Ibid., p. 671.

§ *Street Railway Journal*, 1898, p. 381, and 1899, p. 402.

chusetts Gas Commissioners.* The steady fall in the duplication value of these plants has, on the strictest interpretation of the Massachusetts policy, amounted virtually to an impairment of capital, due, however, to no fault on the part of the companies themselves. And it has greatly hampered them in the acquisition of new capital for additions to the plant. The public convenience in the matter of extensions of electric lighting must have suffered severely, had not the companies been allowed greater latitude than the original statutes apparently contemplated in this regard. As a rule, they have been granted time in which, by retrenchment and reduction of dividends, this deficiency may be remedied. On the other hand, the movement of prices oftentimes becomes of advantage to companies desirous of swelling their capitalization. Thus a street railway equipped with steel rails during the industrial depression of 1893–98 at $22 a ton may now find this portion of its property appraisable at upwards of $35 per ton or presently dropping again to the new price for 1900 of $26 per ton. Here is a distinct fluctuation of more than a third in the value of tangible property upon which capitalization may be based, according to the law.† Nor does it seem to be possible for the Railroad Commissioners to deny the rightfulness of such a demand. Cases are on record, even, where changes of price between the time of purchase of equipment and of application for issues of stock with which to pay for it have been taken into account, so strictly is the statute interpreted.‡

Corroborative proof of the strictness of the Massachu-

* See, for example, their *Fifteenth Annual Report*, 1900, pp. 22, 29, and 32.

† The analogy to the case of a trust company whose capital is invested in securities of fluctuating value is close. *Cf.* the English case of *Verner* v. *General and Commercial Investment Company*, cited in Dicksee, *Auditing*, p. 467. See also *Economist*, 1900, p. 147, and 1890, p. 1504.

‡ In Connecticut, where greater reliance upon original investment seems to be placed than in Massachusetts, the only case where cost of reproduction is taken into consideration is in case of petition for an issue of bonds, which under the law must never exceed one-half the cost of construction and equipment.

setts policy is shown in another way by the table on page 115. Comparing the returns as to tangible assets for Massachusetts as a whole, year by year, a steady increase in valuation is shown from 1887 to 1893, while thereafter an equally noticeable decline is apparent. The cause of this is obvious. The year 1887 marks the early stage of electrical operation, with a low average due to the inclusion of many horse roads and a light electrical equipment at best. Down to 1893 a phenomenal development of electricalization ensued, with high prices, due both to great demand and to costly and cumbrous modes of manufacture. Since 1893 the effects of industrial depression upon prices, the satiation of the demand for electrical transformation, and a notable economy in manufacturing processes have all combined to reduce the expenses of construction and equipment. Note, then, the close correspondence between this phenomenon and the average capitalization, as shown in the last column. The notable decrease is not due to the expulsion of water, but merely to a required conformity of capitalization to value. Such a showing, it is believed, would be impossible under the laws of most of our Commonwealths.

Peculiar difficulty is presented in the case of systems transformed from horse to electric motive power. Almost none of the public-service corporations, until recent years, seem to have written off any annual amount for depreciation. Mere maintenance, entirely distinct from depreciation, has generally, though not always, been provided for out of current revenue; but nothing further has been covered. As a result, the suddenly imposed necessity of entirely transforming the old plant into scrap, and equipping the system anew, offered a great opportunity to the capitalist. To the original capital, now extinct as far as tangible plant is concerned, could be added the entire cost of electricalization. Such was, indeed, the common practice; and much of the flagrant over-capitalization of

street railways can be ascribed to this fact. On any theory of original investment as a base of capital, it is at first sight not easy to contest the policy.*

The leading case of the so-called "Milwaukee four-cent fare" decision raised this issue.† The constitutionality of an ordinance reducing fares from five to four cents was in question, under the Fourteenth Amendment to the Constitution; and the court was called upon to decide as to the real value of the plant of the street railway company, irrespective of its fictitious capitalization of $15,000,000. Counsel for the city contended that the cost of reproduction at present prices, not the original investment, should be considered as a dividend base. To this objection was properly made that to disallow all costs of original installation, forcing thereby capital to attend upon industrial and price stability, would be to put a severe penalty upon enterprise. And in this particular case, to the reproduction value of the plant of $5,000,000 was allowed an addition of $2,000,000 for "costs of pioneering." Adding to this the capitalization of the *surplus* earnings as a measure of the purchase value, decision was rendered that a four-cent fare yielded an inadequate return; and the ordinance thereupon was set aside.

The practical rule of appraisal generally adopted is, as we have said, to estimate the value according to cost of reproduction. From this, however, in order to determine the *structural value*,—that is to say, the "fair value for the purposes of its use,"—an allowance for depreciation must be made.‡ This must be sharply distinguished from

* Cf. *Report of Bureau of Labor Statistics*, Illinois, 1896, p. 54, on Chicago experience; as also New York *Report on Municipal Ownership of Railroads*, 1896, pp. 1851 and 1865.

† *Street Railway Journal*, 1898, p. 397. *Cf.* also *Municipal Affairs*, iv. (1900) p. 212.

‡ Consult E. Mathieson, *The Depreciation of Factories*, third edition, London, 1893; and L. R. Dicksee, *Auditing*, third edition, London. The Massachusetts Municipal Ownership Act requires depreciation to be charged off at 5 per cent. annually.

allowance for expenses of maintenance,—a distinction often lost sight of in practice. Depreciation is entirely different from loss through "wear and tear." No matter how thoroughly in repair a plant may be kept, under modern industrial conditions it is bound to require entire reconstruction within a calculable time. This time may vary from a very few years in the case of gas retorts, through ten or a dozen for street railway road-bed, and up to fifty years for buildings and permanent structures. The necessity of ultimate reconstruction or replacement is the same in any case.

The English courts have never recognized the economic law that capital must ultimately be replaced from profits.* Not until 1878 was the principle recognized in the assessment of the English income tax. Prior to that time the only deduction from gross income allowed was the average actual expenditure for repairs. A test case then showed the necessity of an additional "just and reasonable deduction" for depreciation. The gas companies in this country seem to have had the facts of depreciation, as distinct from maintenance expenses, impressed upon them by long experience; although in Massachusetts a plethora of reserve funds has been the rule by reason of the strict regulation of stock issues. From the statements of twelve of the largest gas-works in the United States, the charge to depreciation far outweighs that for maintenance and repairs.† On the other hand, it may be stated with certainty that until 1895 almost none of the electric surface roads set off any proportion of profits for this purpose.‡

* *Cf.* article "Capital" in Palgrave's *Dictionary of Political Economy.* Many additional cases will be found in Dicksee's *Auditing.*

† *Fourteenth Report United States Department of Labor*, 1899, p. 387. *Cf.* the excellent paper on "Depreciation in Gas Works," by H. S. Chase, in *The Public Accountant*, Philadelphia, 1900. (Reprint.)

‡ *Ninth Report Bureau of Labor*, Illinois, 1896, p. 56; and *Street Railway Journal*, 1899, p. 403. Consult "How to determine the True Net Earning Power of Street Railway Properties" in *Street Railway Journal*, xvi. (1900) pp. 246–250,

The necessity for such a charge to "deferred operating expenses" formed an interesting element in the Milwaukee four cent fare decision above mentioned.* It appeared that the company until 1896 had made no deduction from gross income for depreciation of the plant. The city, therefore, seeking to establish the fact of exorbitant earnings at the former five-cent rate, sought to compel estimation of these net earnings strictly according to the company's books. The court, however, was constrained to admit the patent fact of depreciation, despite the absence of any writing-off for this purpose by the company; and it was allowed that operating expenses ought really to have been a quarter more than they had been made to appear.† Since this time the almost universal foreign practice of creating a special depreciation fund or of carrying reserve or suspense accounts, has been generally adopted.

It is difficult to excuse this hap-hazard sort of finance on the part of American street railways. Even in Massachusetts they have gone bravely on, reporting a steady decrease in the proportion of operating expenses to gross income,—from upwards of 81 per cent. in 1888 to 68.2 per cent. in 1899.‡ With sounder financial methods, this proportion of operating expenses to gross income perhaps ought to be now apppreciably higher. Failure in earlier days to reckon with this factor is probably due to imitation of the financial methods of the steam roads. So long have these been in operation that American experience

for an adequate discussion of this. As also on reserve and suspense accounts in Ibid., 1898, p. 796.

* *Supra*, p. 123.

† The Milwaukee company's accounts are now models in this respect. *Street Railway Journal*, 1899, pp. 351 and 369. The experience of the West End Railway (Boston) is a case in point. Within six years after the installation of an entirely new nine thousand horse power electric plant, the entire station was remodelled at an expense of $500,000, merely to substitute direct driving engines for power transmission by belts.

‡ *Report Massachusetts Railroad Commissioners*, 1900, p. 74. Cf. *Street Railway Journal*, 1897, p. 214, commenting upon this.

has accurately distributed the proper annual expenditure for repairs, maintenance, and reconstruction, necessary to perpetuate the plant in full efficiency upon a cost of reproduction basis. On European roads the accounts are differently kept. Betterment through reconstruction is more commonly charged to fresh capital account rather than to current operating expenses. Yet the practice of keeping distinct accounts with depreciation is said to be general.

Thus far we have spoken of depreciation as applied to deterioration or supersession of physical plant. Depreciation, or rather perhaps amortization, as it might more properly be called, due to a limited franchise life, is of a different sort. The Massachusetts policy, however, not permitting the capitalization to include any franchise valuation, avoids this difficulty altogether.

We may dismiss the final criterion of capitalization, according to *market value*, with a few words. In the first place, such market price bears no relation to the value of the plant "for the purposes of its use," so long as it is in successful operation. And, even in those cases where subsequent sale may have been contemplated, such a sale, in absence of a continuous open market, might take place at an absurdly low figure under pressure. Thus the Massachusetts Railroad Commissioners refused in the case of the Interstate Railroad Company, above mentioned, to consider the auction price as any fair criterion even of structural value. And, on the other hand, such market price, if it be computed upon the price of securities, can never make distinction between the value of the plant and the worth of the franchise. This, in Massachusetts at least, where no value in the franchise is ever allowed to enter into capitalization, means that the franchise rights merely enhance the market price of the existing issues based upon real property. To allow this market price of securities to enter, even re-

motely, into any calculation of property value, would obviously be to overset the restrictive policy entirely.

The problem of legally restricting the capitalization of an old-established corporation is essentially different from that of controlling the organization of a new one. In order to elucidate this, we must consider separately some of the means by which the volume of corporate securities is increased during the life of the companies. Probably the commonest of these is by the payment to shareholders of so-called stock dividends. These consist either of an outright bonus of new shares of stock or bonds; or, in a mitigated form, as stock sold below par or at less than market quotations. Such "melon-cutting," in the parlance of Wall Street, may range as high as 100 per cent., as in the Adams Express Company dividend of 1898. The notable Boston & Albany distribution of State stock in 1882 is a familiar example. This crudest form of inflation of capital, whether up to or beyond the increasing value of the plant, is the easiest to control directly. And statutory prohibition of the issuance of stock at other than a price fixed at public sale would seem to be easily enforceable.

Another somewhat more subtle mode of accommodation of capitalization to enhanced revenue potential, since it may not really augment the volume of securities outstanding, is to substitute stock issues for funded debt. The tendency in this direction seems to be very marked at the present time among the strongest of the American railroads, such as the New York Central, the Pennsylvania, the Central of New Jersey, New York, New Haven & Hartford, and others.* In some of these, outside of Massachusetts, the primary motive would seem to be to take advantage of rights to issue securities at par, where

*Cf. *Bradstreet's*, xix. p. 356, and xxi. p. 163. The Delaware & Hudson controversy is interesting in this connection: Ibid., xxii. p. 227. *Cf.* also Ibid., xv. p. 534, on reorganizations.

market value is high. But in addition there would seem to be the advantage of great elasticity in future dividend possibilities, within the same limits of total capitalization. Thus a substitution of possible 8 per cent. stock for present 4 per cent. bonds clearly permits of the absorption of greater earnings to be derived in future. The advantages of stock issues over bonds in the way of elasticity downward, is, of course, always to be added; as they permit of a cessation of dividend burdens during periods of depression. Probably for this reason the tendency of most reorganization schemes seems to have been in the direction of retirement of bonds in favor of stocks. This mode of substitution is, however, clearly confined to those companies whose finances are in such excellent condition that their stocks will sell above par. To substitute stocks, which can only be placed on the market at ruinous discounts from par value, for bonds,— which, being well secured legally, are quoted much higher,— would seem to be bad finance. Ability to increase capitalization by stock issues to advantage may in general be taken as evidence of prosperity. The only efficient safeguard for public interests in such cases would seem to be through the right of approval exercised by an able administrative commission, where consent should be required prior to all such substitutions.

The gradual accumulation of a surplus, either by good management or by exceptional opportunities, followed by a petition for its capitalization into stock or bonds, constitutes one of the most troublesome problems in any attempt at strict regulation. For, as will readily be observed, in so far as such a surplus — either in the form of cash, of securities of other companies, or of additions to the original plant — represents augmented investment, it would seem to offer a proper basis for addition to capitalization. It cannot be denied that in this case the property has enhanced in value. Unfortunately for the company,

however, a surplus stands too often in the public eye as witness to abnormal and undeserved earnings in the past. In those Commonwealths which once provided in their early railroad charters for escheat to the State of all earnings in excess of a certain amount, usually 10 per cent.; or those, like Massachusetts, which under the recent law of 1898 provide for a special tax upon dividends of street railways in excess of 8 per cent., such a surplus may denote an actual evasion of legal liabilities.* To permit such deductions from dividends in earlier years to be capitalized at a later date would seem to be, indeed, a flagrant subversion of public policy. On the other hand, in many cases the surplus may not represent undeserved earnings or concealed profits. It may be due to enhanced values in right of way, or in investments, whether of real estate or in securities of other companies; thus in no wise indicating an excessive burden upon the consuming public. Even more difficult of just determination, such surplus may be entirely due to exceptionably able business management by which, even with low rates to the public, economy has come to its deserved fruition. To deny the right to capitalize such accumulated earnings is to penalize enterprise and to discourage economy; neither of which, certainly, is consonant with wise public policy.

As illustrative of the difficulties presented by the above-described situation, we may instance the recent case of the Haverhill Gas Company in Massachusetts. The capitalization of this company — originally, in 1871, fixed at $75,000 — was not increased through years of prosperity, until a surplus amounting to nearly $300,000 had been accumulated. This existed, not as cash or securities, but in the form of plant; that is, in new buildings, enlarged retorts and reservoirs, extensions of mains, and the like. The surplus, moreover, far from being the result of extor-

* The pending suit of the State of New Hampshire against the Manchester & Lawrence railroad is a case in point.

tionate rates for gas, was largely due to exceptional management. This point must be strongly emphasized; for it constitutes the novel element in the case. For years the rate of $1 or $1.10 per thousand cubic feet had prevailed, — a rate recently obtainable only in the metropolitan centre of Boston, and appreciably below that customary in other neighboring cities of equal size. The situation was complicated by the attempt of certain foreign capitalists to water its stock through a lease to a finance company. With this phase of the matter we shall have to do later. For the moment we have to discuss merely the justice of allowing the company directly to realize some return upon these accumulated earnings, through an increase of its capitalization, up to the structural value of the plant. The Gas Commissioners ordered the price of gas reduced to 80 cents, upon petition of the mayor and others, who asked that it be fixed at 70 cents. This figure, it was estimated, would enable the company to pay 8 per cent. dividends upon its original capital, carrying nothing further to surplus. Similar standards, according to the showing of the petitioners for reduction, would give prices per thousand in other cities as follows: Cambridge, $1.02; Fall River, 94 cents; Lowell, 87 cents; Springfield, $1.08; and Worcester, 91 cents.* All of these, as will be noted, are very much above the Haverhill rate.

The argument of the advocate of restriction is to the effect that, even granting the surplus to be a reward of economy and efficient management, and not of extortion, this surplus belongs to the public. It should be regarded merely as a deferred dividend, which reaches the people in instalments, through the low price of gas which the greatly improved plant makes possible; in other words, that municipal ownership of the plant has really ensued, leaving it to be operated, however, by a private company

* *Investigation of Boston Gas Companies*, Committee on Manufactures March, 1900, tables presented by G. W. Anderson, p. 10. (Pamphlet.)

for the fixed rental of 8 per cent. To this contention, answer is made that the argument fails, both theoretically and practically. From the former point of view alone, it is defective, in that it strikes at the root of all enterprise. It confounds this present case with those in which the surplus is a result of exorbitant charges or of deficient service. Its effect would inevitably be to give support to mediocrity of management alone. It is absolutely at variance with the theory that profits form no part of price. For although no direct condition of competition of plants may exist, there being municipal monopoly; yet, the purview of the public being made State-wide through public reports, competitive price conditions prevail, nevertheless. All reward beyond the normal return upon investment being denied to extraordinary economy and ability, no incentive to improvement of service would longer exist. Such extensions and improvements must, however, continually be made in the interest of the public. And herein the practical weakness of too restrictive a program appears. Denied the incentive to accumulation of surplus through economy,— that is to say, discouraged from making additions to the plant necessary for improved service out of operating expenses,— the way is always open to acquire new capital for the same purpose, by an increased issue of stock or bonds. Is it not better that this new capital should be produced from within, allowing the company some participation in the profits through a moderate capitalization of its surplus, rather than that all expenditure for improvement should come from without, thereby saddling upon the consumers the additional interest or dividend charges? A tardy recognition of the cogency of this argument would seem to appear in the refusal of the Commission to order a reduction of the price of gas in Lynn to a strictly minimum profits level.* Whether similar reasoning in the parallel

* Decision rendered May 15, 1900. *House Document*, No. 1351.

Haverhill case would have been followed, could the infamous stock jobbing element have been eliminated, must remain in doubt.

Next in importance to the conversion of a surplus into stock as a means of increasing capitalization, is the expedient of funding contingent liabilities or a floating debt. These may exist in any of their common forms, as loans, bills payable, credited vouchers and accounts, wages and salaries due, or even in the mixed status of receiver's certificates. Such debts are generally indicative of reckless financiering. They may sometimes be necessary to the conduct of a growing business. Nevertheless, an abnormally large proportion of current liabilities, as a rule, is an unfavorable symptom. It implies, as in the familiar examples of the Erie and the Union Pacific Railroads, an inability to raise additional capital as needed, by the sale of bonds. Such a condition is usually the accompaniment of a deficiency of current income, whereby maintenance has to be met in part by a charge to capital account; or, as in the sudden appearance of a gigantic floating debt of $12,000,000 in the case of the Third Avenue Railroad in New York City, it may be a result of corruption or political "bleeding." But, on the other hand, the creation of such a floating debt may sometimes serve as a means to the enlargement of capitalization. This would seem to have been the case of late with public-service corporations in Massachusetts, particularly the electric light and power companies. Denied the expedient of surplus conversion into stock, both by the public policy already discussed and by the great depreciation in the cost of equipment, recourse has most naturally been made to the opposite expedient. Almost ten years ago * the Gas Commissioners called attention to the desire on the part of companies managed by "men of a speculative turn of mind" to cover all expenditure for construction by issues

* *Sixth Annual Report*, 1891, p. 34.

of interest-bearing scrip. A striking example of such financiering occurred in 1895, in the attempt of the Boston Electric Light Company to fund some $240,000 of floating indebtedness.* It appeared that the tangible assets were not equal to the capitalization, presumably because too large a proportion of earnings had been distributed as dividends, leaving too little for maintenance of the plant and writing off for depreciation. "Floating debt, representing the cost of new plant needed to take the place of that which had been worn out and useless, is essentially a part of the expense of carrying on the business, and should be provided for, if possible, out of the earnings. Capital stock has no claims upon the earnings precedent to those of creditors, and not to be governed by this fact is to endanger the well-being of the stock itself." † Oversight of the finances of each company year by year, especially in this matter of the proportion of current income applied to betterment, particularly in a field where falling costs of reproduction prevail, seems to be an essential part of any effective scheme.‡

The consolidation of companies offers a convenient mode of surreptitiously adding to capitalization. This may take place in any one of three ways. In the first place, the merger may lead to reconstruction or replacement of operating plant, with its attendant devices of betterment entirely defrayed by means of new stock issues. This has already been described. Less common is the second method. This consists in gerrymandering the constituent companies, so that those strong ones oppressed with surplus earnings may have aggregated

* *Tenth Annual Report of the Gas Commission*, 1895, p. 42.

† Similar and more recent cases occurred in Malden and Waltham respectively. *Fifteenth Annual Report Gas Commissioners*, 1900, pp. 22 and 39.

‡ A case has been privately cited to me, where a street railway company wishing to make a favorable exhibit of earnings, tore up its recently laid rails, providing for new ones by issue of stock; and then credited the large proceeds from sale of old equipment to current revenue.

about them the roads which are less favorably situated. The claim is openly made * that the Massachusetts Electric Companies, composed of forty odd suburban traction lines, is having its membership so distributed in three main groups, each to be separately operated, as to effect this end. Thus the Lynn and Boston road, earning perhaps twice its legally allowed dividend of 8 per cent., is made to average up its earnings with a number of small roads which are scarcely meeting operating expenses. The result is a 6 per cent. dividend upon their united capital, with a net yield to shareholders far in excess of that contemplated under the law of 1898. The third stock-watering device attendant upon consolidation consists merely in the substitution of a high-grade for a low-grade security. For example, a weak company, whose stock is quoted at 50, is merged in a second operating corporation, with stock, bid, we will say, at 200. This latter company issues new stock worth $200, share for share, in exchange for the $50 stock, which is thereupon cancelled. The legality of such operations under Massachusetts law is open to question. But they would seem to have been not infrequently undertaken in recent years.

The final method of evasion of anti-stock-watering statutes is found in the creation of independent finance corporations, to which the operating company may be leased, sold, or trusteed. The practice may best be made clear by a few examples. In 1893 the Brooklyn City Railroad Company, operating with horse power, was capitalized at $6,000,000. At that time its power was transformed to electricity; and, as has been customary in such cases, the opportunity was seized for an increase of stock and bonds to $18,000,000. Simultaneously the road was leased to the Brooklyn Heights Railroad Company, a tiny corporation operating only a mile of track and capitalized at $200,000. This company agreed to meet in-

* *Street Railway Items*, Boston, October 1, 1900.

terest charges upon $6,000,000 of bonds and to pay 10 per cent. upon the $12,000,000 of stock of the leased company. Finally, in the same year, the Long Island Traction Company, incorporated under the laws of West Virginia with $30,000,000 capital, purchased the stock of the intermediary,—the Brooklyn Heights Company,—in order to absorb such surplus revenue as might remain over and above its obligations to the primary and sole operating concern. Thus was a fivefold increase of capitalization up to the desired figure finally effected.*

The creation of such finance companies has not until recently occasioned much difficulty under the strict prohibitions of Massachusetts law. The Light, Heat, and Power Corporation, organized under the laws of West Virginia, has been attempting since 1898 to operate the electric plants in Milford and Clinton, for example.† It would seem, however, that — legal quibbles aside — a clear case of violation of the statutes could be established. Far more serious is the expedient adopted by the Haverhill Gas Securities Company.‡ This finance concern, by incorporating under the laws of Massachusetts, evaded the provisions of the law of 1894, which declared invalid alone all leases of a domestic to a *foreign* corporation. The new company issued stock to the amount of $500,000, in payment to the owners of the gas company for their original capital of $75,000 and their accumulated surplus of about $300,000. The money necessary for formal compliance with the Massachusetts law requiring all stock issues to be paid up in full was temporarily advanced by the promoters, and paid over to the owners of the gas company in exchange for their property. The next step was to issue and sell 5 per cent. debentures to the amount of $500,000 to recoup

* From letter of Judge Gaynor of the Supreme Court, reprinted in *Report of the Committee upon Municipal Ownership of Railroads* (Albany, 1896), ii. p. 1604.

† *Report Massachusetts Gas and Electric Light Commissioners*, 1900, p. 33.

‡ Ibid., 1900, p. 6.

themselves for their advance, depositing the original stock of the gas light company with a trustee as collateral. Thus the bondholders of the Securities Company virtually paid for the gas-works; while the control of its business remained in the promoters' hands, they retaining the Securities Company's stock of $500,000 as their share of the proceeds. As a net result, then, we find the capitalization of the operating plant, upon which the public are to pay charges, advanced from $75,000 to $1,000,000. Only two remedies were open. One was to annul the charter of the finance company: the other was to reduce the price of gas. This latter course was the one adopted by the Commission, as we have seen, they recommending, also, that the legislature dissolve the company's corporate existence.

Still a third similar mode of evasion, in addition to leases to foreign or domestic finance companies, is being tried in Massachusetts. This is to avoid the corporation laws altogether, by leasing the operating companies to mere business associations. These are, in practice, nothing more nor less than partnerships, with all the provisions of unlimited liability in force. In this respect they closely resemble the New England Gas and Coke Company,* or the real estate trusts, of which there are several in Boston. The leading example of these in the field of quasi-public corporations is the Massachusetts Electric Companies. This association now controls what were originally some forty distinct street railroad companies, forming an unbroken network throughout the eastern quarter of the State. These operating companies have an aggregate stock capitalization of about $9,000,000.† They seem to be slowly consolidating, it is said ‡ with the end in view of

* See the excellent history of this organization in the *Quarterly Journal of Economics*, xiv., 1899, pp. 92-120.

† The bonded indebtedness, amounting to approximately $10,000,000 (?), remains outside the control of the association, largely in the hands of the original purchasers.

‡ *Street Railway Items*, September 15, 1900.

merger in a single corporation, to be known as the Massachusetts Electric Company. The $10,000,000 of stock of this consolidation will then be entirely owned by the Massachusetts Electric Companies' Association, represented by securities outstanding to the amount of $24,000,000. The legal status of this latter organization is as yet undetermined by the courts. In any event, a prompt extension of the provisions of the anti-stock-watering acts to cover all such associations would surely act as a powerful deterrent in future.

Enough has been said to illustrate the extreme complexity of the problem of regulating capitalization, even in the limited class of public-service companies. The ultimate remedy, as applied to all classes of corporations, must come from the courts and the legislatures. But in either case the continued necessity of a strong and steady administrative control through some permanent board or commission, supplementing and giving due effect to the law, is apparent. Massachusetts has not, perhaps, accomplished all that could be desired as yet either in justice to the companies or to the public; but her experience should be of great value, in view of the honest purpose which seems to have inspired it throughout.

WILLIAM Z. RIPLEY.

MASSACHUSETTS INSTITUTE
OF TECHNOLOGY.

# NOTES AND MEMORANDA.

## AN APPROXIMATE METHOD OF MEASURING EXCESSIVE PRODUCTION OR CONSUMPTION.

While the sophism of a "general overproduction" has long since been exploded, there can be no question that a temporary overproduction in one economic group, or even in the entire body politic, is a most common phenomenon. In the long run, it is impossible for all the people to make more things than all the people can use; but in any limited period they may easily make more or fewer things than they wish to use during that time. And, in times when capital is timid through political uncertainty or when capitalists believe it to be a safer or better policy to delay their contemplated new investments, permitting their funds to lie temporarily idle or lending them in foreign countries if a sufficient demand exists, there may be a general overproduction in the sense that all the people have made and are making more things than they have money to pay for. Mr. Bellamy endeavored to emphasize this point in his ingenious "Parable of the Water-tank," though his reasoning is marred by a fatal error, in that he fails to take into account the reinvestment of amounts received as interest by capitalists.

In America questions connected with the relative inequality of consumption and production during different periods are of growing importance. The partial exhaustion of new lands open for settlement confines the increasing population within limits more definitely fixed, so that workmen left idle by any congestion of the industrial circulation are not as free as formerly to make occupation for themselves by pioneering. The enormous increase in the efficiency of labor due to improved machinery multiplies the product before the demand is educated to meet it, and often temporarily turns an excessive share of the returns into the hands of the capitalist, who

in some cases may be influenced by various reasons against an immediate reinvestment of his profits. The formation of immense trade combinations, which seek to maintain prices by regulating production, introduces another comparatively new feature into the problem of demand and supply; and the sharp speculative fluctuations resulting from frequent changes of governmental policy serve to disturb further the uniform operation of economic laws. The purpose of this article is to suggest an approximate method of measuring an excess of production over consumption during a given period, based upon the movements of currency.

In a country of stationary population, without foreign trade, having a currency of fixed volume, and where credit is not in use as a substitute for currency, it is evident that *the increase or decrease in the quantity of idle currency during any period of time would be in proportion to the excess of production over consumption during that time.* For example, let us suppose an isolated community without credit, consisting of W, workmen; F, farmers; T, tradesmen; M, manufacturers; and C, capitalists,— a classification corresponding to the present condition of things sufficiently well for purposes of illustration. For the sake of simplicity we will suppose that a single bank issues all currency. The amount of currency is absolutely fixed, $100,000 being in circulation among the people, and $10,000 more being held in the bank as reserve. It is evident that the $100,000 will be continually passed from one person to another until it is "saved" by some one or paid to some capitalist as returns on his investment. In either case it goes to group C; for, if saved by a workman, he becomes to that extent a capitalist. As capitalists are disposed to reinvest all additions to their funds, this portion of the $100,000, amounting, let us say, to $10,000, is immediately put into circulation again by being invested in new enterprises or in the enlargement of old enterprises. It may pass through numerous hands, but in the end is inevitably paid out somewhere as wages.

So long as this state of affairs continues unchanged, production and consumption will be equal, and there will be no alteration in the amount of reserve held by the bank. But

suppose that, through fear of political changes or for any other reason, capitalists decide that it is safer not to reinvest immediately, but place the $10,000 currency they have received in the bank-vaults for safe keeping. The result is that $10,000 less than before is paid out in wages, the workmen have $10,000 less to spend, and the demand for produce and manufactured articles is correspondingly lessened. It will therefore be found at the end of the period under consideration that there has been an overproduction of produce and manufactured articles, and more than a normal quantity of unsold goods is in the hands of producers and middlemen. It is evident that this overproduction will be in proportion to the reduction in wages paid, or, in other words, in proportion to the increase in idle currency held by the bank.

Of course, it is not contended that the above illustration is accurate or complete. In reality, at a time when capitalists feared to reinvest their interest, they would also withdraw some portion of their original capital from the enterprises in which it was employed. Further, the lessening of consumption would result in some curtailment of production before the end of the period under examination; and the varying rapidity in circulation of currency in different channels would further interfere with mathematical accuracy in the working of this law. But such irregularities would, for the most part, balance themselves in the consideration of any large community; and, in the comparison of two periods of time, practically the same irregularities would be found in each, so that the law as stated is believed to be a close approximation to actual results in a community of the character specified.

In applying this method of measurement to modern conditions, various confusing features appear. The most prominent of these is the extended use of credit as a substitute for currency. With credit as a means of transferring capital, such as notes and mortgages, we have nothing to do, as these instruments are not sufficiently negotiable to be used as substitutes for currency to any appreciable extent. With checks and drafts, which are used almost entirely as substitutes for currency, the case is different; but the difficulty is more apparent than real. The very fact that they are used as substitutes for

currency indicates that the volume in which they are issued will vary nearly in proportion with the increase or decrease in the quantity of real currency which is in circulation among the people. An increase in the activity of trade will require a greater circulation of currency and at the same time a greater volume of substitutes for currency.

The change in the volume of currency substitutes will not be exactly contemporaneous with the change in actual currency in circulation, since the latter is almost entirely used by wage-earners, farmers, and consumers, while the checks and drafts are mostly used by middlemen and manufacturers. Hence the change in currency substitutes will slightly follow that in actual currency. But this does not seriously interfere with the operation of the law; for, even if the volume of currency substitutes should show no change for a little time after a decrease in the amount of actual currency in circulation, that fact would be in itself the strongest evidence of overproduction.

A more important consideration is the yearly movement of currency to the country at harvest time and back to the cities during the remainder of the year. To avoid interference from this yearly tide in money movements, it is necessary to base comparisons on the same time of year. There will even then be a little difference between the movement in a year of good crops and in a year of poor crops, but in a country where agriculture is so diversified as in the United States that element is not important. Moreover, it is to be remembered that a year of poor crops, and consequent lessening of currency in circulation, means a loss of effective demand for goods, and to that extent in itself brings about a condition of overproduction.

No hard-and-fast line can be drawn between currency which is denominated idle and that considered to be in circulation. Cash in the government treasuries and in national bank reserves would constitute the chief bulk of idle currency, and the amount of these holdings is easily obtainable at frequent intervals from the reports of the Comptroller. Reserves of banks other than national may be included, if desired, the important point being that the same classification must be em-

ployed for all the periods compared. Changes in population, and in the total quantity of currency, as well as in exports and imports of both goods and specie, must of course be allowed for, statistics on these points being regularly issued by the government.

It merely remains to be noted that the working of this method is absolutely disrupted for the time by a general financial panic. Reference is not had to "stock exchange panics," which are apt to occur at least once a year, and consist simply in a decline of prices for securities, nor to those sharp and sudden declines in the prices of commodities which are often termed panics, but to that state of apprehension in the minds of the public which causes one individual to turn his capital into cash for no other reason than that he fears others will do so. In such instances large amounts of currency temporarily disappear, being neither in use as circulating medium nor as treasury or bank reserves, but in hiding. Such panics do not usually occur oftener than once in ten or twenty years; and the currency so withdrawn will for the most part come into sight again within a few months, though the consequent partial paralysis of industry may, and usually does, continue for some years.

G. C. Selden.

## HEREDITY AND ENVIRONMENT: A REJOINDER.

In the course of the friendly controversies in which sociologists are sometimes so human as to indulge, it not infrequently happens that the point at issue, at first sharp and distinct, expands and elaborates itself until it becomes a phantom-like growth, perhaps vaguely imposing, but without much substance, and clothed mainly in misapprehensions as to the meaning of the terms employed by one or another of the disputants.

Something like this appears to have occurred in recent comment as to the alleged position of the anthropo-sociologists with reference to questions of heredity and environment. The point at issue between the school of investigators who labor under the above admittedly cumbrous designation, on the one hand, and Professor Ripley, on the other, has been mainly as to the relative importance as a sociological factor of the hereditary or racial composition of certain population groups as compared with the conditions of environment to which the groups are subject. By explicit definition the heredity that we emphasized was the heredity of congenital characters;* and the effects of environment that we deprecated were the immediate or direct effects upon the members of the present generation.† That Ripley's criticism and counter-argument were based upon substantially the same understanding of the two terms follows almost necessarily from the whole context and course of the discussion. The problem in this its original and tangible form calls for much further investigation, and perhaps for compromise towards the happy mean which may lie between the position of the two schools. But my present object is merely to restore the discussion to its better self by pointing out the extent to which, in Mr. Ripley's last instalment,‡ it has become the victim of variation — doubtless of "accidental variation" — through a

* Lapouge, *Les Selections sociales*, pp. 48, ff.; Ammon, *Die Gesellschaftsordnung*, §4; Closson, *Quarterly Journal of Economics*, x. p. 156.

† *Les Selections sociales*, pp. 81, ff.

‡ *Quarterly Journal of Economics*, May, 1900, pp. 426, ff.

radical change in the content now given to the terms "influences of environment" and "heredity."

The phrase, "effects of environment," may, in the absence of any qualification, be understood in either of two quite different senses. First, there are the immediate modifying effects upon the individual or upon the individuals of a given generation. Secondly, there are the indirect effects upon the race through selection; that is, through the increase of those best fitted and the elimination of those least fitted to the environmental conditions. These two significations of the phrase may often stand in the sharpest contrast. The immediate effect of alcohol is to make a proportion of any given generation more or less inebriate. Its selective or indirect effect may be (according to some authorities, is) to eliminate the individuals and family strains that are most susceptible to its abuse.* The direct influence of modern hygiene — which may for our present purpose be regarded as one factor in human environment — is to improve the average health of the present generation. Its selective influence, according to Drs. Haycraft, Schallmayer, Brinton, Kellogg, and others, is, by allowing the weaker to survive and propagate, to lower the average physique of future generations. The first result of monastic celibacy is, perhaps, an increase in religious fervor: its selective result is to eliminate the elements in the community most susceptible to religious feeling. The temporary effect of injudicious charity is to relieve the suffering of the defective classes: its selective effect is to stimulate the increase of these classes in succeeding generations. The obvious consequence of a somewhat severe climate is to produce hardship: its selective consequence is to breed a race capable of enduring hardship.

Evidently, then, the immediate effects and the selective effects of environment are not at all the same thing. Yet Mr. Ripley's present criticism appears absolutely to confuse the two; for, having in mind what the anthropo-sociologists have said as to the relatively slight importance of modifying influences acting directly and *en masse*, he accuses us of mini-

*I do not wish to be understood as supporting this particular thesis, which has been sustained at great length by Dr. Archdall Reid. I employ it here simply for purposes of illustration.

mizing the force of selection,—the very thing that we have been trying to emphasize.

Our critic seems to imagine that, in asserting the significance of the racial factor, we regard any given race as a sort of *Ding-an-sich*, or at least as a kind of special creation independent of external conditions. In reality, like Professor Ripley himself and like probably all other anthropologists, we of course attribute racial differences among men to the influences of selection, in part purely environmental, in part social,—economic, military, sexual, and so on. Making allowance for the fact that "accidental" or unexplained variations may have offered in the various groups different kinds of human material for the play of selection, we may say roughly that race is the slowly formed product of past selection. But the race once formed has ordinarily considerable stability, even under the selective influence of a changed environment. If, according to a recently resurrected theory of the ultra-environmental school, the climate of the United States is tending to reduce the present population to the physical type of the Indians,* the process is at least somewhat gradual, so that the careful observer may still detect differences between the Gibson girl and the Apache squaw.

In view, then, of the extent to which race admittedly represents the stored-up and transmitted effects of past selection, largely environmental, which persist against immediate modifying effects, and in view, too, of the elaborate way in which the anthropo-sociologists have studied the formation especially of the race *Europaeus* by climatic selection† and its subsequent selective modification by natural and social environment,‡ it is somewhat surprising to be told that we "refuse to accord any due recognition to the most potent factor in . . . selection; namely, environment." It is we who, in emphasizing what some of our critics style "the vulgar theory of race," really emphasize the selective effect of environment: it is Mr.

* The theory seems to be asserted seriously, in spite of the obvious consideration that nearly all the present factors in selection except climate (such as sexual preference, diet, protection from the weather, warfare, hygiene, standard of life) function wholly differently from the way they did among the aborigines.

† Lapouge, *L'Aryen*, pp. 47-186; *Les Selections sociales*, pp. 14, 15.

‡ *L'Aryen*, pp. 325-365, 406; *Les Selections sociales*, pp. 97, 147.

Ripley himself who tends somewhat to subordinate this to immediate modifying influences.

A somewhat similar lack of discrimination seems to be at the bottom of Professor Ripley's idea that our position in regard to heredity is inconsistent with that of Weismann and Wallace. These authors, he tells us, "have stood out rigidly for the all-sufficiency of selection in accounting for the phenomena of evolution. Consequently, they limit the potency of heredity to a corresponding degree." Now what Wallace, Weismann, and the Neo-Darwinians generally, as opposed to the Lamarckians, "limit," is the transmissibility of acquired, or somatic, characters. They and all biologists accept and insist upon the heredity of congenital characters. Indeed, without such heredity, selection would have no meaning. To say, for example, that selection is tending to reduce the proportion of Indians in the total population of the United States would be meaningless if the children of the whites and the children of the Indians were indistinguishable; that is, if heredity failed to work. Selection presupposes heredity. Heredity alone would tend to perpetuate all varieties of life: selection merely determines what varieties heredity shall be allowed to preserve.

The position of Lapouge and Ammon in this matter is in complete harmony with that of Weismann and Wallace, except that it is in some respects less dogmatic. All four authors accept the inheritance of congenital traits: all four reject the theory of the transmissibility of the effects of use and disuse. There is just about as much inconsistency as existed between the conductor who called the station and connections at one door of the car and the brakeman who called at the other door, "Same at this end!" It is therefore difficult to find anything in the premises that is "quite illogical" or even "rather anomalous," unless perhaps it be the position of the critic who holds that because we insist on the importance of the heredity of congenital characters we are in conflict with those who deny the inheritance of acquired characters.

CARLOS C. CLOSSON.

LOS ANGELES, CALIFORNIA.

## THE GERMAN COINAGE ACT OF 1900.

The act of June 1, 1900, makes the first legislative changes in the coinage system of Germany since 1873, and completes the adoption of the gold standard in that country. It provides for the speedy withdrawal of the thaler and its conversion into subsidiary coins by the simple device of an increase of the silver subsidiary coinage from 10 marks per capita to 15 marks.

It was supposed in 1873 that the arrangements then made would lead to the disappearance of the thaler within a few years, and no one could have imagined that a considerable portion of them would still remain in circulation at the end of the century. It will be recalled that the act of 1873 authorized the recoinage of such an amount of the silver coins of the German states as would provide a silver subsidiary coinage for the empire of 10 marks per capita. Before 1879 nearly 380,000,000 marks were taken for that purpose. By the sale of silver in London a further reduction of 673,000,000 was brought about; but, on account of the fall in the price of silver, the German government discontinued its sales in 1879, and they have never been resumed. Since that time the stock of thalers has been reduced only as the growth of population required further additions to the subsidiary coinage to bring it up to the level fixed by law. In this way some 90,000,000 marks have been absorbed in the last twenty years, and the amount of thalers still remaining is generally estimated at about 360,000,000 marks. The law of 1900 now simply hastens a process which was in any case being worked out, though with exceeding slowness. The increase to 15 marks per head of the present population will absorb more than two-thirds of the thalers; and the last of them will be required when the population reaches 62,000,000, which is expected as early as 1910. The increase to 15 marks will be made gradually, the government having fixed upon 30,000,000 as the annual increment until the process of recoinage is completed.

The purpose of the act is clearly not to supply a demand

for small coins which has not hitherto been satisfied. The thaler, or three-mark piece, is obviously quite as convenient for every-day use as the two-mark and five-mark pieces, into which the greater part of the thalers will be recoined. But the thaler is full legal tender, and for that reason it is regarded as an element of weakness in the German monetary system. It may be questioned, however, whether the withdrawal of the legal tender quality from the silver, while that silver remains in undiminished amount, will add appreciably to the strength of the system. That quantity of small coin which is required in daily transactions will be no source of difficulty, whether it be legal tender or not; while any amount beyond those requirements will not stay in circulation, but will flow back upon banks and governments in their daily receipts. That there is a greater quantity of silver in Germany than is required with the present population is conclusively shown by the mass of silver (amounting to something like 250,000,000 marks) in the vaults of the Reichsbank. The present law creates no new demand for silver, except through the withdrawal of the five-mark gold coin; and that is more than neutralized by the withdrawal of the silver twenty-pfennig piece. Moreover, the silver coinage of the country will ultimately be increased by some 40,000,000 marks under the provisions of the new act. The portion of alloy in the subsidiary coins is about one-ninth greater than in the thaler: hence the 360,000,000 marks in thalers will make about 400,000,000 marks of subsidiary silver. The measure as originally proposed by the government would have reduced the coinage by 35,000,000 marks, provision being made for the sale of the silver left over; but agrarian and bimetallic influences in the Reichstag secured the recoinage of all the thalers and of the "seigniorage" as well. The same influences also added to the act a declaration — similar to that attached to the currency act of 1900 in the United States — that the act was not to be regarded as an obstacle to international bimetallism. The importance of such a declaration may be said to fall far below that which is often associated with the term "academic."

In essentials the new law thus provides for the conversion

of over-valued legal tender coin into over-valued subsidiary coin of nearly the same quantity, and so affords a striking illustration of the excessive importance which is still attributed to the legal tender quality, irrespective of the different functions performed by different kinds of currency.

O. M. W. Sprague.

Harvard University.

# RECENT PUBLICATIONS UPON ECONOMICS.

**Chiefly published or announced since August, 1900.**

**An asterisk prefixed to a title indicates a second and more detailed notice of a book announced in a previous number.**

## I. GENERAL WORKS, THEORY AND ITS HISTORY.

BERTHEAU. L'égalité. Paris: Pédone. 1900. 18mo. pp. 284. 3.50 f.

CURRAN (J. H.). Francis A. Walker u. seine hauptsächlichsten Theorien. Jena: G. Fischer. 1900. 8vo. pp. 95. 2.50 m.
[In Conrad's Abhandlungen.]

DESMAR (J.). Jean-Joseph-Louis Graslin (1727-1790). Essai d'une étude historique et critique sur un précurseur de l'économie politique classique. (Thèse.) Rennes: Imprimerie des arts et manuf. 1900. 8vo. pp. 255.

DIETZEL (H.). Weltwirtschaft und Volkswirtschaft. Dresden: Jahn & Jaensch. 1900. 8vo. pp. 120. 4 m.
[Vol. 5 of Jahrbuch der Gehe-Stiftung zu Dresden.]

FAVRE (J.). Le prêt à intérêt dans l'ancienne France. Évolution des doctrines et de la législation. (Thèse.) Paris: Rousseau. 1900. 8vo. pp. 281.

*KOSTANECKI (A. v.). Der wirthschaftliche Werth vom Standpunkte der geschichtlichen Forschung. Versuch einer Morphologie des wirthschaftlichen Werthes. Berlin: Puttkammer & Mühlbrecht. 1900. 8vo. pp. xii, 213. 4 m.
[The author sets forth a Besitztheorie, which is supposed to combine and supersede the two opposing theories in vogue,—Arbeitstheorie and Bedürfnisstheorie.]

LEGRAND (R.). Richard Cantillon. Un mercantiliste précurseur des physiocrates. Paris: Giard et Brière. 1900. 8vo. 3 fr.

MANTEUFFEL (Dr. C.). Das Sparen. Sein Wesen u. seine volkswirtschaftliche Wirkung. Jena: G. Fischer. 1900. 8vo. pp. 147. 3 m.
[In Conrad's Abhandlungen.]

MASÉ-DARI (E.). M. T. Cicerone et le sue idee sociali ed economiche. Turin: Frat. Bocca. 1900. 12mo. pp. 390.
[A scholarly and interesting study. Part I. examines Cicero's views on equality, plutocracy, religion, law; Part. II., those on the State, finances, revenue-farming, agriculture, slavery, usury, and the like.]

MAYR (Geo. v.). Grundriss zu Vorlesungen über praktische Nationalökonomie. Tübingen: H. Laupp. 1900. 8vo. pp. 103. 2.40 m.
[I. Einleitung und allgemeiner Teil.]

MAZAN (J. de). Les doctrines économiques de Colbert (thèse). Paris: Rousseau. 1900. 8vo. pp. 217.

NICHOLSON (J. S.). Principles of Political Economy. Vol. II. Part II. (concluding the work). London and New York: Macmillan. 8vo.
[Announced.]

RAVAIL (P. J.). L'usufruit au point de vue économique. Paris: Rousseau. 8vo. pp. 227.

TAYLOR (W. G. L.). Exercises in Economics for Colleges, High

Schools, and Independent Students. Lincoln, Neb.: The University Publishing Co. 1900. 12mo. pp. 122.

[Arranged by topics with an introduction, questions, and exercises, and a bibliography under each head.]

WILLOUGHBY (W. W.). Social Justice. New York: Macmillan. 1900. 8vo. pp. 385. $3.

[A scholarly discussion, including an exposition and criticism of different theories of distributive justice, but vague in its conclusions, partly because based upon an idealistic system of ethics.]

* ZWIEDENECK-SÜDENHORST (O.v.). Lohnpolitik und Lohntheorie, mit besonderer Berücksichtigung des Minimallohnes. Leipzig: Duncker & Humblot. 8vo. pp. xiv, 410. 9 m.

[Contents: I. Lohnpolitik bis zum 19 Jahrhundert; II. Lohntheorie und theoretische Lohnpolitik; III. Thatsachen der modernen Lohnpolitik (especially England and Germany); IV. Voraussetzungen und Grundlagen der modernen Lohnpolitik (die Korrektur der freien Lohnbildung eine ethische Forderung); V. Lohnbegrenzung als Mittel der Lohnpolitik (especially in advocacy of Minimallohn).

### *In Periodicals.*

COHN (G.). Ethik und Reaktion in der Volkswirthschaft. Jahrb. f. Gesetzg., 24, Heft 3. [A reply to Sombart's thesis that the "ethical" school of economics is a protest and reaction against the rapidity of the present progress in industry.]

CROCE (B.). Sul principio economico. Giorn. degli Econ., July. [Open letter to V. Pareto, objecting to the mechanical (hedonistic) conception of economics.]

FARNAM (H. W.). Schmoller's Grundriss. Yale Rev., Aug. [A laudatory but discriminating review.]

FUHR (G. A.). Zur Preisbildung. Aus meiner Erfahrung. Zeitschr. ges. Staatsw., 56, Heft 3.

HAUSSONVILLE (Comte d'). Le Play d'après son œuvre. La Réforme Sociale, Aug.

MAZZOLA (U.). Il momento economico dell' arte. Giorn. degli Econ., Aug. [Inaugural address delivered by the lamented author at Pavia in 1897.]

PARETO (V.). Un' applicazione di teorie sociologiche. Riv. Ital. di Sociol., Aug. [Il periodo ascendente della crisi religiosa; il decadere dell' antica aristocrazia; il sorgere di una nuova aristocrazia, — *e.g.*, the English trade-unionists and the allied socialists; il fenomeno suggettivo,— the religious ardor of the socialists, the budding aristocracy.]

——. Sul principio economico. Giorn. degli Econ., Aug. [Reply to Croce on questions of method in economics.]

ROSS (E. A.). Social Control, XVII., XVIII. Amer. Journ. of Sociol., July, Sept. ["The Maintenance of Ethical Elements," "The Radiant Points of Social Control."]

SCHIATTARELLA (R.). Che cos' è la sociologia? Riv. Ital. di Sociol., June. [The answer sought in the philosophy both of Comte and of Spencer.]

SMALL (A. W.). The Scope of Sociology, IV., V. Amer. Journ. of Sociol., July, Sept. [Both instalments on The Assumptions of Sociology.]

VALENTI (G.). La rendita di monopolio. Giorn. degli Econ., Sept. ["Esame critico di alcuni concetti di Achille Loria"; continuing previous papers in the same journal which examined critically Loria's theories. The conclusion is again adverse to Loria.]

VELLEMAN (Anton). Der Luxus in seinen Beziehungen zur Sozialökonomie. Zeitschr. ges. Staatsw., 56, Heft 3. [Continued. Measures of the past; the theories underlying them; and discussion of possibility of effective regulation.]

WILLOUGHBY (W. W.). The Ethics of the Competitive Process. Amer. Journ. of Sociol., Sept. [A chapter of the writer's book on Social Justice, since issued.]

## II. SOCIAL QUESTIONS, LABOR AND CAPITAL.

ADLER (P.). Die Lage der Handlungsgehilfen gemäss den Erhebungen der Kommission für f. Arbeiterstatistik. Stuttgart: Cotta. 1900. 8vo. pp. 197. 4 m.

[In Münchener volkswirthschaftliche Studien.]

BONCOUR (J. P.). Le fédéralisme économique. Paris: Alcan. 1900. 8vo. pp. 400.

["La liberté, c'est le droit pour le groupement ouvrier de poursuivre et d'établir une souveraineté du travail."]

DEROUIN (H.), GORY (A.), and WORMS (F.). Traité théorique et pratique d'assistance publique. Paris: Contant-Laguerre. 1900. 2 vols. in 8vo. pp. 824, 628. 28 fr.

*GIDE (C.). La co-opération. Conférences de propagande. Paris: Larose. 1900. 8vo. pp. vii, 314. 7 fr.

[Reprint of eleven articles and papers on such subjects as: the future of co-operation; the changes co-operation is destined to work; the enemies of co-operation; the twelve virtues of co-operation. . . . A large future is expected for co-operative production, by development from the co-operative stores.]

GOLTZ (H. v. d.). Die Wohnungsinspektion und ihre Ausgestaltung durch das Reich. Göttingen: Vandenhoeck u. Ruprecht. 1900. 8vo. 1.50 m.

[Heft 1 of Abhandl. des Vereins Reichs Wohnungsgesetz.]

HARTMANN (K.). Die gemeindliche Arbeitsvermittelung in Bayern, mit bes. Berücksichtigung des städt. Arbeitsamtes München. Munich: J. Schweitzer. 8vo. pp. 115. 3 m.

[The author is Inspektor und Vorstand of the Munich Bureau.]

LECOQ (M.). L'assistance par le travail en France. Paris: Giard et Brière. 1900. 8vo. 7 fr.

LUSK (H. H.). Our Foes at Home. New York: Doubleday & McClure. 1899. 12mo. pp. 297.

[The author, a former member of the New Zealand Parliament, writing of American conditions, maintains that among a people who worship success the danger from grasping commercialism is especially great. This danger is increased by the private ownership of land, and safety lies in winning back again the people's birthright.]

MUENSTERBERG (E.). Bibliographie des Armenwesens. Berlin: C. Heymann. 1900. 8vo. pp. 160. 3 m.

[An excellent bibliography, arranged by topics, with author and subject index.]

PEABODY (F. G.). Jesus Christ and the Social Problem. New York: Macmillan Co. 12mo.

[Announced. The author is Professor of Christian Morals in Harvard University.]

PELLOUTIER (F. et M.) La vie ouvrière en France. Paris: Schleicher frères. 1900. 8vo. pp. 348. 5 fr.

[In Bibliothèque internationale des sciences sociologiques.]

SCHÄFFLE (Alb.) u. LECHLER (P.). Die staatliche Wohnungsfürsorge aus Anlass des Reichstagsbeschlusses vom 14 Nov., 1889. Berlin: E. Hofmann. 1900. 8vo. pp. 52. 1 m.

SPAHR (C. B.). America's Working People. New York: Longmans, Green & Co. 1900. 8vo. $1.25.

[Papers reprinted from the *Outlook*, with corrections; based on personal observations and imbued with a spirit of social sympathy. Subjects: Factory Towns in New England and in the South; The Negro as an Industrial Factor and as a Citizen; Coal Mines in Pennsylvania; Iron Centres; Trade Unions in Chicago; The Mormons; The Northern Farm.]

UNITED STATES INDUSTRIAL COMMISSION. Report on Prison Labor. Washington: Government Printing Office. 1900. 8vo. pp. 166.

[A brief report from the commission, recommending legislation on the model of that now in force in New York; followed by a general survey of the question, for which indebtedness is expressed to M. W. Steuart.]

*In Periodicals.*

BERNSTEIN (E.). Der gegenwärtige Stand der Wohnungsfrage in England. Archiv Soz. Gesetzg., 15, Heft 5, 6.

BORGHT (R. v. d.). Das Invalidenversicherungsgesetz, 1899. Jahrb. f. Nat. Oek., 19, Heft 6. [Text of the amending legislation; preceded by a summary of the changes.]

———. Die Reform der Deutschen Unfallversicherung. Jahrb. f. Nat. Oek., 20, Heft 2. [The government proposals of January, 1900.]

DAVIS (Katherine B.). The Modern Condition of Agricultural Labor in Bohemia. Journ. Polit. Econ., Sept. [The decline of feudalism and the growth of the contract-labor system; the wages, nominal and real, of laborers, and their standard of living.]

ELLWOOD (C. A.). Public Outdoor Relief. Amer. Journ. of Sociol., July. [Epitome, in selected quotations, of opinions pro and con.]

EMBREE (FRANCES B.). The Housing of the Poor in Chicago. Journ. Polit. Econ., June. [Based upon an analysis of that part of the Seventh Special Report of the United States Commissioner of Labor relating to Chicago, upon facts gathered by the Improved Housing Association of Chicago and upon personal investigation.]

FRANKENBERG (H. v.). Die Betriebs - (Fabrik-) Krankenkassen. Jahrb. f. Gesetzg., 24, Heft 3.

HAMMOND, (M. B.). Women's Wages in Manual Work. Polit. Sci. Quarterly, Sept. [Explaining the apparently lower wages of women on the ground of the inferior productiveness of their labor.]

HOBHOUSE (E.). Dust - women. Econ. Journ., Sept. [The life of the three hundred London dust-sorters: "We eats well, we drinks well, and we sleeps well."]

JOHN (V.). Die italienischen Arbeiterkammern u. deren Bedeutung f. d. nationale Produktivität. Jahrb. f. Nat. Oek., 19, Heft 6. [Concluded from Heft 5. Believes these associations will advance Italy by raising the laborers' standard of living.]

KEMPEL (F.). Die zweckmässigste Form der Arbeitslosenversicherung. Zeitschr. ges. Staatsw., 56, Heft 3. [Critical discussion of the various methods thus far suggested.]

LEWIS (A.). The Housing of the Poor in London. Econ. Rev., April. [A plea for the better management of slum property rather than the erection of new dwellings.]

LINDHOLM (S. V.). Analysis of the Building-trades Conflict in Chicago from the Trades - union Standpoint. Journ. Polit. Econ., June. [History of the Building Trades Council and of the Building Contractors Council, representing the two hostile camps, with an analysis of the claims of each.]

MOORE (F. W.). The Glasgow Family Home. Econ. Rev., July. [A housing experiment possessing some unique features.]

PARRY (E. A.). The Workmen's Compensation Act: What it was to be and What it is. Fortnightly, July. [The writer, a County Court Judge, explains the legal difficulties experienced in the working of this act, "notorious in the law courts as a masterpiece of unskilful legislation."]

RUSSELL (C. E. B.) and CAMPAGNAC (E. T.). The Organization of Costermongers and Street-vendors in Manchester. Econ. Rev., April. [A trade-union to defend the right of "outcry."]

SCAIFE (W. B.). Work and Wages in France. Forum, Sept. [A careful description of recent labor legislation and the condition of workmen in France.]

SCHULZ (M.). Ueber Schiedsverträge der Arbeitgeber und Arbeitnehmer nach dem deutschen

Gewerbegerichtsgesetz und der Reichscivilprozessordnung. Archiv Soz. Gesetzg., 15, Heft 5-6.

SELLERS (E.). Old Age Pensions in Denmark. Contemp., Sept. [An eulogistic description, with some criticism.]

SZÁNTÓ (M.). Landwirtschaftliche Arbeitsvermittlung in Ungarn. Jahrb. f. Gesetzg., 24, Heft 3. [A statute of 1888 described.]

TOYNBEE (C. M.). Poverty and the Poor Law. Econ. Rev., July. [A brief but weighty article, arguing against "the sentimental recoil" to outdoor relief. The writer is the widow of Arnold Toynbee, and has for several years taken an active part in the work of the Guardians of the Poor at Oxford.]

WELCK (A.). Die Arbeitslosen-Versicherung im Kanton Basel-Stadt. Jahrb. f. Gesetzg., 24, Heft 3. [Account of the legislation rejected by the referendum vote of November, 1899.]

WIESE (L. v.). Die neuere Entwickelung des Arbeitsnachweises in Deutschland. Jahrb. f. Gesetzg., 24, Heft 3. [Mainly descriptive.]

WILSON (J. C.). Poor Law Statistics. Econ. Rev., April. ["The policy which restricts outdoor relief does not lead to a necessary increase of indoor pauperism or of expenditure" in other directions.]

WOLFF (H. W.). The Spread of Co-operation. Econ. Rev., July. [A useful survey of the progress of co-operation in the several countries of Europe.]

## III. SOCIALISM.

BOULARD (Ed.). Le collectivisme intégral. Philosophie et pratique. Paris: Société d'éditions scientifiques. 1900. 18mo. pp. 372. 3.50 fr.

COHN (L.). Die Wohnungsfrage u. die Sozialdemokratie. Ein Kapitel sozialdemokratischer Gemeindepolitik. Munich: M. Ernst. 1900. 8vo. pp. 76. 1.30 m.

DUGAST (F.). Les lois sociales devant le droit naturel. Paris: Giard et Brière. 1900. 18mo.

[Social laws are made by the privileged classes, as a bulwark for their privileges; the people should be disenchanted.]

WEBER (Marianne). Fichte's Sozialismus und sein Verhältniss zur Marx'schen Doktrin. Tübingen: J. C. B. Mohr. 1900. 8vo. pp. 122. 3 m.

[In Volkswirtschaftliche Abhandlungen der badischen Hochschulen.]

WEISENGRÜN (P.). Der Marxismus und das Wesen der sozialen Frage. Leipzig: Veit & Co. 1900. 8vo. pp. 480. 12 m.

UNSIGNED. Premier congrès national et international de la coopération socialiste. Paris: Société nouvelle de librairie et d'édition. 1900. 18mo. pp. 212. 2.50 fr.

[An account of the congress held in Paris July 7-10, 1900.]

*In Periodicals.*

SOREL (G.). Les polémiques pour l'interpretation du Marxisme: Bernstein et Kautzky. Rev. Internat. de Sociol., April.

## IV. LAND.

DUTT (R. C.). Famines in India. Open Letters to Lord Curzon on Famines and Land Assessments in India. London: Kegan Paul. 1900. 8vo. pp. 344. 7s. 6d.

[The Causes of Famines; Famine Insurance Grants; Railways and Irrigation; the Land Tax. . . .]

GATTI (Prof. G.). Agricoltura e socialismo. Le nuove correnti dell' economia agricola. Palermo: R. Sandron. 16mo. pp. viii, 516. 4 l.

[Part I., Produzione agricola; II., Tendenze tecniche ed economiche dell' agricoltura; III., Partito socialista e classi agricole.]

WALLACE (Robert). The Farming Industries of Cape Colony. London: P. S. King. 1900. 8vo. 10s. 6d.

[A first-hand treatment of the subject by an expert.]

SMYTHE (W. E.). The Conquest of Arid America. New York: Harper's. 1900. 8vo. pp. xvi, 326. $1.50.

[A detailed and excellent description of irrigation operations and possibilities in the several States of the West. Co-operative colonies for irrigation are advocated. An optimistic concluding chapter looks to such co-operation as a solution for the problem of the unemployed.]

STEINBRÜCK (Dr. C.). Die Entwickelung der Preise des städtischen und ländlichen Immobiliarbesitzes zu Halle und im Saalkreise. Jena: G. Fischer. 1900. 8vo. pp. 87 and diagrams. 2 m.

[In Conrad's Abhandlungen.]

### *In Periodicals.*

MERLIN (R.). Enquête sur le métayage. Bull. de la Participation aux Bénéfices, April. [Serves as a supplement to the author's book on this subject (1896), confirming the conclusion that métayer tenure has grown under the influence of agricultural depression.]

RAUCHBERG (Dr. H.). Die Landwirthschaft im Deutschen Reich. Archiv Soz. Gesetzg., 15, Heft 5, 6. [The results of the census of 1895 summarized.]

TEELE (R. P.). Water Rights in the Arid West. Journ. Polit. Econ., September. [The hindrances to agriculture by irrigation in the West are: (1) the failure of capital and labor to get together on a just basis; (2) the unsettled condition of titles to water.]

## V. POPULATION, EMIGRATION, AND COLONIES.

AYMONIER (E.). Le Cambodge. Le royaume actuel. Paris: Leroux. 1900. 8vo. pp. 479. 20 fr.

[The author is director of the École coloniale.]

HAUSER (H.). Les colonies allemandes impériales et spontanées. Paris: Nony. 1900.

[The author is professor at the University of Clermont. This volume, the first of a series of Études d'Économie Sociale, gives an account of the German East Africa Company and the new Guinea Company, and of their absorption by the Empire, as well as of the more recent acquisitions in the Pacific and in China.]

PIOLET (J. B.). La France hors de France. De notre émigration, sa nécessité, ses conditions. Paris: F. Alcan. 1900. 8vo. 10 fr.

[In Bibliothèque d'histoire contemporaine. Sets forth "la possibilité et la nécessité d'un fort mouvement d'émigration des Français vers leurs colonies."]

PIOT (E.). La question de la dépopulation en France (le mal; ses causes; les remèdes). Paris: Mouillot. 1900. 16mo. pp. 94.

[The author is senator from the Côte-d'Or.]

PROPER (E. E.). Colonial Immigration Laws. A Study of the Regulation of Immigration by the English Colonies in America. New York: The Columbia Press (Macmillan Co., agents). 8vo. pp. 81. 75 cts.

[In Columbia University Studies. A narrative chiefly of the anti-immigration laws, "few in number and very limited in their application."]

VARIOUS. Les colonies françaises. Paris: Challamel. 1900. 5 vols. in 8vo. 7.50 fr.

[An elaborate work prepared by many collaborators for the Paris Exposition under the supervision of the ministry of the colonies. Vols. III. and V. are devoted more particularly to economic matters. Vol. III., prepared by C. Guy, chief of the geographic service, is entitled "La mise en valeur de notre domaine colonial." Vol. V. contains "Régime de la propriété," by Imbart de la Tour; "Régime de la main-d'œuvre," by M. Dorvault; and "L'agriculture aux colonies," by M. Lecomte.

*In Periodicals.*

BOSCO (A.). Le legge e la questione dell' emigrazione in Italia. Giorn. degli Econ., July. [On the Italian of 1888 and pending amendments, and on the general prospects of emigration from Italy.]

KELLER (A. G.). Italian Expansion and Colonies. Yale Rev., Aug. [Narrative of the colonization experiments of the last twenty years, chiefly Eritrea.]

SITTA (P.). La Popolazione della Repubblica Argentina. Riv. Ital. di Sociol. [Summary of the results of the Argentine census of 1895.]

## VI. TRANSPORTATION AND EXCHANGE.

BRÉSILLION (A.). De la transportation (étude historique et critique). Paris: Rousseau. 8vo. pp. 260.

HAMON (F.). L'avenir de la politique française en matière de chemins de fer. Paris: Béranger. 1900. 8vo. 10 fr.

[A continuation of the work of Richard de Kaufmann, of the University of Berlin, which M. Hamon has just translated and published in France.]

LE ROUX DE BRETAGNE (C.). Les primes à la marine marchande en France. Paris: Giard et Brière. 1900. 8vo. pp. 300.

UNITED STATES INDUSTRIAL COMMISSION. Report on Transportation, including review and digest of evidence and testimony. Washington: Government Printing Office. 1900. 8vo. pp. 832.

[Constitutes Vol. IV. of the Commission's Reports. Chiefly testimony on various aspects of American railway problems, made available through an excellent summary and index prepared by E. D. Durand.]

*In Periodicals.*

CAVANAGH. The Pooling of Railway Freight Cars. Journ. Polit. Econ., June. [Estimates the loss resulting from cars lying idle, and advocates a system of pooling "whereby the borrower or user and the owner participate in the loss or profit involved in the movement of, or delay to, the cars."]

CLAUS (H.). Die Eisenbahnen des russischen Reichs bis zum Jahre 1892. Archiv f. Eisenbahnwesen, 1900, Heft 4. [Review of the two large volumes published in French in 1897 by the Russian division of the standing committee of the International Railway Congress.]

MCLEAN (S. J.). State Regulation of Railways in the United States. Econ. Journ., Sept. [A survey of

the whole history of the matter, with some reflections.]

WAHL (K.). Die Entwickelung der holländischen Handelsschiffahrt im 19ten Jahrhundert. Jahrb. f. Gesetzg., 24, Heft 3. [Describes the growing share of the Dutch ports in the trade to and from Germany, not noting, however, that it is but a part of the general growth of the traffic on the German waterways at the expense of the traffic on the railways.]

WIEDENFELD (Dr. K.). Die wirthschaftliche Bedeutung der Sibirischen Bahn. Archiv f. Eisenbahnwesen, 1900, Heft 4, 5. [Concluding instalment.]

## VII. INTERNATIONAL TRADE AND CUSTOMS LAWS.

HEITZ (Prof. E.). Das Interesse der Landwirtschaft an den Handelsverträgen. Berlin: J. Guttentag. 1900. 8vo. pp. 106. 2.50 m.

[Ein Rückblick auf die deutsche Handelspolitik seit 1879. In Schriften der Centralstelle für Vorbereitung von Handelsverträgen.]

### *In Periodicals.*

BERTOLINI (A.) AND GRAZIADEI (A.). La rinnovazione dei trattati di commercio e gli interessi della provincia di Bari. Giorn. degli Econ., Sept. [First article. The treaties are to expire 1903.]

CHARLTON (J.). Imperial and Colonial Preferential Trade. Forum, Oct. [Chiefly on the trade between Great Britain and Canada.]

STERNS (W. P.). The Foreign Trade of the United States from 1820 to 1840. Journ. Polit. Econ., Sept. [Second paper. Statistics of the exports and imports of various commodities.]

WAGNER (H. C.). Die Getreidezollpolitik Portugals seit 1888. Jahrb. f. Nat. Oek., 20, Heft 2. [Importation of wheat and wheat flour is regulated for the purpose of securing to the domestic producer a "normal" price, which was fixed in 1889 and raised in 1899. An instructive study in economics and politics.]

WRIGHT (C. D.). Commercial Ascendancy of the United States. Century, July. [Based on statistics of exports and imports.]

## VIII. MONEY, BANKING, CREDIT, AND PRICES.

BONN (M. J.). Die Vorgänge am Edelmetallmarkte in den Jahren 1870–1873. Stuttgart: Cotta. 1900. 8vo. pp. 128. 3 m.

[In Münchener volkswirthschaftliche Studien.]

CANNON (J. G.). Clearing Houses. Their History, Methods, and Administration. New York: Appleton. 1900. 8vo. pp. xiv, 383. $2.50.

[A detailed and authoritative account of the mechanism and the functions of American clearing houses, with summary chapters also on Canada, London, and Japan. The author was some time Comptroller of the Currency, and is now vice-president of a bank in New York.]

CASASUS (D.). Les institutions de crédit. Étude sur leurs fonctions et leur organisation. Brussels: Société belge de librairie. 1900. 8vo. pp. 554.

HEIL (Dr. K.). Die Reichsbank und die bayerische Notenbank in ihrer gegenseitigen Entwickelung in Bayern 1876–1899. Leipzig: A. Deichert. 1900. 8vo. pp. 68. 1.60 m.

[In Wirthschafts- u. Verwaltungsstudien, edited by G. Schanz.]

LOUBET (P.). La Banque de France et l'escompte. (Thèse.) Paris: Rousseau. 1900. 8vo. pp. 280.

Merritt (F. D.). The Early History of Banking in Iowa. Iowa City, Ia.: The University Press. 1900. 8vo. pp. 150.

[An accurate and detailed account, covering the period from 1836 to 1846.]

Nelson (S. A.). The A B C of Wall Street. New York: S. A. Nelson. 1900. 16mo. pp. 164. $1.

[Partly a description of operations on the stock, grain, cotton exchanges; partly elementary information about foreign exchange, currency, and the like. Forty pages are given to a dictionary of Wall Street phrases.]

Richardson (R.). Coutts & Co., Bankers. Memorials of a Family distinguished for its Public Services. London: Stock. 1900. 8vo. 7*s.* 6*d.*

[Like the accounts of other London private banks, disappointing on the economic questions.]

Skinner (T.). London Banks and Kindred Companies and Firms. London: Simpkin & Co. 1900. 8vo. 10*s.*

*In Periodicals.*

Conant (Chas. A.). The Law of the Value of Money. Annals Amer. Acad. Polit. and Soc. Sci., Sept. [Suggesting qualifications of the quantity theory of money.]

Crivellari (G.). I precedenti della riforma monetaria in Austria-Ungheria. Giorn. degli Econ., Sept. [Carrying the narrative and analysis to 1892.]

Falkner (Roland P.). The Currency Law of 1900. Annals Amer. Acad. of Polit. and Soc. Sci., July. [Concludes that the new law has improved the machinery for withstanding a pressure on the gold supply, but has increased the pressure itself.]

Heinemann (E.). Die Berliner Grossbanken an der Wende des Jahrhunderts. Jahrb. f. Nat. Oek., 20, Heft 1.

Jannasch (Dr. R.). Die Kreditversicherung im Exportgeschäft. Jahrb. f. Gesetzg., 24, Heft 3. [German banks should establish branches in the countries to which Germany expects to export.]

Johnson (J. F.). The Currency Act of March 14, 1900. Polit. Sci. Quarterly, Sept. [The act will make easier the preservation of the gold standard, but will effect no improvement in the banking system.]

Laughlin (J. L.). Recent Monetary Legislation. Journ. Polit. Econ., June. [Maintains that a subtle game of politics has been played with our recent monetary legislation through the influence of the Senate. The act of 1900 provides no means for maintaining the gold standard that did not exist before.]

Lestrade (C. de). La Perse et son système monétaire. Journ. des Écon., Aug.

Sayous (E.). La place de Londres en temps de crise. Rev. d'Écon. Pol., July. [Showing the unpreparedness of the English banking system to meet a financial crisis.]

## IX. FINANCE AND TAXATION.

American Economic Association. Essays in Colonial Finance by Members of the American Economic Association. New York: Macmillan Co. 1900. 8vo. pp. 303. $1.50.

[Ten essays by different hands, prepared under the direction of a special committee, on the finances of various colonies, thus: French, by E. R. A. Seligman; German, by I. Loeb; Dutch, by Clive Day; Italian, by A. G. Keller; and so on.]

Bossche (Georges Van den). L'impôt sur les successions en Angleterre, en France, et en Belgique. Louvain: Impr. Polleunis et Ceuterick. 1900. 8vo. pp. 142. 1.50 fr.

[Reprinted from the Revue des questions scientifiques. The author, a Belgian magistrate, gives concise account of existing legislation and proposed changes.]

CREANGA (Dr. G. D.). Die direkte Besteuerung in Preussen u. Rumänien. Darstellung der Reformen d. direkten Besteuerung in Preussen von 1810 bis zur Gegenwart und anwendg. derselben auf d. rumän. Steuerwesen. Berlin: E. Ebering. 1900. 8vo. pp. 237. 6 m.

[In Rechts u. staatswissenschaftliche Studien, publ. by Dr. E. Ebering.]

FOWLER (Sir H. H.). Municipal Finance and Municipal Enterprise. Annual Address of President of Royal Statistical Society. London: P. S. King. 1900. 8vo. pp. 26. 1s.

MINORET (M.). La contribution personnelle et mobilière pendant la Révolution. Paris: Rousseau. 1900. 8vo. pp. 720. 10 fr.

NITTI (F. S.). Nord e sud: prime linee di una inchiesta sulla ripartizione territoriale delle entrate e delle spese dello stato in Italia. Turin: Roux e Viarengo. 1900. 8vo. pp. 209. 3 l.

[The drift of the book is that Southern Italy has not had its share.]

POUGNET (M.). Les valeurs mobilières étrangères et les fonds d'état étrangers devant l'impôt. Paris: Rousseau. 8vo. pp. 227.

SAY (Léon). Les finances de la France sous la troisième république. Tome III. Paris: C. Lévy. 1900. 8vo. pp. vii, 699. 7.50 fr.

[This third volume of Say's papers and addresses covers the period 1883–96. Among the subjects are the bank's note issue, budget, income tax, relations of the government to the Bourse, and the like.]

*In Periodicals.*

BULLOCK, (C. J.). The Origin, Purpose, and Effect of the Direct-Tax Clause of the Federal Constitution, II. Polit. Sci. Quarterly, Sept. [Second paper, discussing the different interpretations of the clause, and rejecting some interpretations adopted in the judicial decision of 1895.]

COHN (Dr. H.). Das preussische Gesetz betreffend die Warenhaussteuer. Archiv Soz. Gesetzg., 15, Heft 5, 6.

EDGEWORTH (F. Y.). The Incidences of Urban Rates, II. Econ. Journ., Sept. [A continuation of the treatment of the subject in the preceding Journal.]

GRAF (F.). Die Tabackbesteuerung in Deutschland. Ann. des Deutsch. Reichs, 1900, No. 10. [Continued: on the monopoly proposal of 1882.]

HAMILTON (J. H.). The Place of the Service Tax in Modern Finance. Journ. Polit. Econ., June. [Public wants are reducible to a demand for services, which may be obtained either by direct levy upon the strength and intelligence of the public or through the levy of goods or of money.]

McCREA (R. C.). Tendencies in the Taxation of Transportation Companies in the United States. Annals Amer. Acad. of Polit. and Soc. Sci., May.

NINA (Luigi). Die kleinsten Grundsteuer- und Gebäudesteuerquoten in dem italienischen Steuerrechte. Zeitschr. ges. Staatsw., 56, Heft 3. [Should be abolished; a mistaken application of the principle of equal taxation.]

WEST (Max). The Income Tax and the National Revenues. Journ. Polit. Econ., Sept. [An income tax is a direct tax within the meaning of the Constitution, but is not desirable.]

## X. HISTORY, BIOGRAPHY, AND DESCRIPTION.

ASHLEY (W. J.). Surveys, Historic and Economic. London: Longman. 8vo. pp. xxvii, 476.

[A collection of essays and reviews contributed to various journals during the last eleven years, with some hitherto unprinted papers. Announced.]

BELGIUM, Office du Travail. Les industries à domicile en Belgique. Vol. II. Brussels: I. Lebèque. 1900. 8vo. pp. 219, 82, 156.

[Contents: (1) E. Dubois, L'industrie du tissage du lin dans les Flandres; (2) M. Anciaux, L'industrie du tressage de la paille dans la vallée du Geer; (3) C. G. de Pélichy, L'industrie de la cordonnerie en pays Flamand. With charts and maps.]

BELOW (G. von). Das ältere deutsche Städtewesen und Bürgerthum. Bielefeld: Velhagen u. Klasing. 1898. 8vo. pp. 136, and 6 Kunstbeilagen u. 134 authent. Abbildgn. 3m.

[A survey of German municipal life in the Middle Ages, addressed to the general reader, and profusely illustrated; one of the series of monographs "zur Weltgeschichte," edited by E. Heyck.]

BENNETT (R.) and ELTON (J.). History of Corn Milling. Vol. III. Feudal Laws and Customs. London: Simpkin. 1900. 8vo. pp. 342. 10s. 6d.

[Vol. I. appeared in 1898; Vol. II., in 1899.]

BRYCE (George). The Remarkable History of the Hudson's Bay Company. London: Low, Marston & Co. 1900. 8vo. pp. 524. 14s.

CARPENTER (F. G.). South America: Social, Industrial, Political. New York: The Saalfield Publ. Co. 1900.

[Reprinted newspaper letters, touching, among industrial topics, on Bolivian gold and silver, Chilian nitrate, Argentine wheat, Brazilian coffee.]

DELON (C.). Les paysans (histoire d'un village avant la Révolution). Chaleauroux: Mellottée. 16mo. pp. xvi, 276.

DESCHESNE (L.). L'évolution économique de l'industrie de la laine en Angleterre. Paris: L. Larose. 1900. 8vo. pp. 282.

[Dissertation for the doctorate "en économie politique" at Liège. Covers briefly the Middle Ages and early modern period, more fully the Industrial Revolution and the nineteenth century.]

DRANCOTTE (H.). L'industrie dans la Grèce ancienne. Vol. I. Brussels: Société belge de librairie. 1900. 8vo. pp. 343. 7.50 fr.

EHRLER (Jos.) Agrargeschichte u. Agrarwesen der Johanniterherrschaft Heitersheim. Ein Beitrag zur Wirtschaftsgeschichte des Breisgaus. Tübingen: J. C. B. Mohr. 1900. 8vo. pp. 77. 2.50 m.

[In Volkswirtschaftliche Abhandlungen der badischen Hochschulen.]

FOSTER (Wm.), editor. Letters received by the East India Company from its Servants in the East. Vol. IV., 1616. London: Low, Marston & Co. 1900. 8vo. 21s.

[Vols. I.–III. appeared in 1896–99.]

GEORGE (Henry, Jr.). Life of Henry George. New York: Doubleday, Page & Co. 8vo. $1.50.

[Announced. A biography of the elder George, by his son.]

GERMANY, Statistical Bureau. Die deutsche Volkswirthschaft am Schlusse des 19 Jahrhunderts. Auf Grund der Berufszählung von 1895 und nach anderen Quellen bearbeitet im kais. statist. Amt. Berlin: 1900. Puttkammer & Mühlbrecht. 8vo. pp. 216. 1 m.

[An official summary, for the general public, of the great census of occupations in 1895, whose results in detail fill 18 volumes.]

HESSE (Dr. R.). Entwickelung der agrarrechtlichen Verhältnisse im Stifte, späteren Herzogtum

Verden. Jena: G. Fischer. 1900. 8vo. pp. 244. 5 m.

[In Conrad's Abhandlungen.]

KELLES-KRANZ (C. de). Les bases économiques des formes primitives de la famille. Paris: Giard et Brière. 1900. Pam., 8vo. 1.50 fr.

[The author is professor at the Collège libre des sciences sociales.]

KMIOTEK (Dr. B.). Siedelung und Waldwirtschaft im Salzforst. Ein Beitrag zur deutschen Wirtschaftsgeschichte. Leipzig: A. Deichert. 1900. 8vo. pp. 194. 3.60 m.

[In Wirtschafts- u. Verwaltungsstudien, edited by G. Schanz.]

LEONARD (E. M.). The Early History of English Poor Relief. Cambridge: The University Press; New York: Macmillan. 1900. 8vo. pp. 368. 7*s.* 6*d.*

[A considerable addition to our knowledge for the later years of the sixteenth century and the early years of the seventeenth. Largely from unprinted sources.]

MARTIN (G.). L'industrie et le commerce du Velay aux XVII[e] et XVIII[e] siècles. Le Puy-en-Velay: Marchesson. 1900. 8vo. pp. 236.

NIEBOER (Dr. H. J.). Slavery as an Industrial System. Ethnological Researches. The Hague: M. Nijhoff. 1900. 8vo. pp. 474.

[A scholarly work, treating the economic aspects of slavery, primarily among savages. Part I., Descriptive, is on the various forms of slavery and on its geographical distribution. Part II., Theoretical, is on slavery among hunting, pastoral, agricultural tribes, with chapters on the transition from serfdom to freedom. The main thesis, following Loria and Wakefield, is that where cultivatable land has been appropriated, slavery tends to disappear.]

PAGE (T. W.). The End of Villainage in England. New York: Macmillan Co. 1900. (Publications of Amer. Econ. Assoc.) 8vo. pp. 99. $1.

[The publication in English form of the remarkable German dissertation wherein the author for the first time traced the progress of commutation of services for money rents, with the aid of material in the Record Office.]

PERQUEL (L.). La crise du charbon en Allemagne. Rapport présenté au ministre du commerce. Paris: Guillaumin. 1900. 4to. 2.50 fr.

SCHMELZLE (H.). Der Staatshaushalt des Herzogtum Bayern im 18 Jahrhundert, mit Berücksichtigung der wirtschaftlichen, politischen, und sozialen Verhältnisse des Landes dargestellt. Stuttgart: Cotta. 1900. 8vo. pp. 425. 9 m.

[In Münchener volkswirthschaftliche Studien.]

SCHULTE (Dr. A.). Geschichte des mittelalterlichen Handels und Verkehrs zwischen Deutschland und Italien mit Ausschluss von Venedig. Leipzig: Duncker & Humblot. 1900. 8vo. 2 vols. 30 m.

SHARPE (R. R.), editor. Calendar of Letter-books of the City of London. Vol. I., Letter-book A, circa A.D. 1275–1298. Vol. II., Letter-book B, circa A.D. 1275–1312. London. 1899, 1900. Printed by order of the corporation. Imp. 8vo. pp 259, 320.

[These letter-books furnish valuable material for the study of mediæval methods of business and legal usages. Only a small portion of their contents has hitherto been accessible (in Riley's *Memorials*); and the publication of the present calendar, giving a summary of each document, and all the more interesting particulars, will be of great service.]

STEFFEN (G. F.). Studien zur Geschichte der englischen Lohnarbeiter, m. besond. Berücksichtigung der Veränderungen ihrer Lebenshaltungen. Vol. I. Pt. 1. Stuttgart: Hobbing & Büchle. 1900. 8vo. pp. 176, 2 colored plates. 4 m.

### *In Periodicals.*

BELOW (G. v.). Grosshändler u. Kleinhändler im deutschen Mittelalter. Jahrb. f. Nat. Oek., 20, Heft 1. [There was no division

of traders into wholesale dealers and retail: the retail dealer incidentally carried on wholesale dealings also.]

BRUCE (P. A.). The Social and Economic Revolution in the Southern States. Contemp., July.

CALDERON (G.). Russian Trade in China. Contemp., Sept. [Arguing that England, with its excess of imports into Russia, should help Russia with her excess of exports.]

CARLILE (W. W.). A Significant Chapter in the History of Currency. Econ. Rev., July. [Argues that the adoption of the gold standard by England took place insensibly in the eighteenth century, owing to the disastrous state of the depreciated silver.]

CARLYLE (R. W.). Famine Administration in a Bengal District in 1896–97. Econ. Journ., Sept. [By the collector in charge.]

CROWELL (J. F.). The Sugar Situation in the West Indies. Yale Rev., Aug. [Better methods of production declared to be the sole feasible remedy.]

DIX (A.). Die deutschen Ostseestädte und die Grundlagen ihrer wirthschaftlichen Entwickelung. Preuss. Jahrb., Sept. [An elaborate survey of the commercial and industrial situation of the German cities on the Baltic.]

GREENWOOD (W.). Fifty Years of British Industry from the Workman's Point of View. Econ. Rev., July. [The autobiographical impressions of a well-known leader of the co-operative movement.]

HUTCHINS (B. L.). Regulation of Wages by Gilds and Town Authorities. Econ. Journ., Sept. [Evidence for more independent action on the part of the English craft companies, A.D. 1551–1705, than is usually attributed to them.]

JAFFÉ (E.). Die englische Baumwollindustrie und die Organisation des Exporthandels. Jahrb. f. Gesetzg., 24, Heft 3. [The increased participation of Continental countries and the United States in the trade of markets once exclusively held by Britain.]

KOLLMANN (P.). Die gewerbliche Entfaltung im Deutschen Reiche nach der Gewerbezählung vom 14 Juni, 1895. Jahrb. f. Gesetzg., 24, Heft 3.

KROPOTKIN (P.). The Small Industries of Britain. Nineteenth Century, Aug. [Small industries are not a mere survival from the past and are not doomed to disappear.]

McARTHUR (E. A.). The Regulation of Wages in the Sixteenth Century. English Historical Rev., July. [Shows, from unprinted sources, that the assessment of wages formed part of the regular routine work of the justices within the city of London.]

UNWIN (G.). A Seventeenth Century Trade Union. Econ. Journ., Sept. [An important contribution to a little-known period of English industrial history.]

VINOGRADOFF (P.). Agricultural Services. Econ. Journ., Sept. [Examines the contention that the uncertainty in the choice of services is a criterion of villain tenure in mediæval England.]

WACHSMUTH (Prof. C.). Wirthschaftliche Zustände in Aegypten während der griechisch-römischen Periode. Jahrb. f. Nat. Oek., 19, Heft 6. [Taxation; and a private account book of the Ptolemaic era.]

## XI. STATISTICS.

KÖRÖSY (Dr. Jos.). Die finanziellen Ergebnisse der Actien-Gesellschaften. Kritik und Reform der Statistik. Berlin: Puttkammer & Mühlbrecht. 1900. 8vo. pp. 45. 1 m.

[Memoir prepared for the Congress on Securities held at Paris in 1900.]

*In Periodicals.*

BENCE-JONES (H.). On the Consumption of Alcoholic Beverages. Journ. Roy. Statist. Soc., June. [Comparative statistics on the consumption per head of spirits, wine, beer.]

NEYMARCK (A.). La statistique internationale des valeurs mobilières. Bulletin Inst. Internat. de Statistique, XI., livr. 2. [Report to the Institute at its St. Petersburg meeting of 1897. Also reprinted separately by Guillaumin, Paris.]

TURQUAN (V.). Évaluation de la fortune privée en France (suite). Rev. d'Écon. Pol., July.

WILLCOX (W. F.). American Census Methods. Forum, Sept. [Explaining the actual work of compiling the census.]

## XII. REPRINTS, TRANSLATIONS, AND NEW EDITIONS.

ANITCHKOW (M.). War and Labour. London and New York: Longmans, Green & Co. 1900. 8vo. pp. xii, 578. $5.

[A German translation of the Russian original appeared earlier in the year. Part I. considers international relations at large; Part II., tariffs, free trade, and the like; Part III., government activity in general, covering a wide range of subjects. The treatment is discursive, the point of view in general individualistic.]

ASHLEY (W. J.). Histoire et doctrines économiques de l'Angleterre. Tome II. La fin du moyen âge. Traduit sur la 3ᵉ édition anglaise, revue par l'auteur. Paris: Giard et Brière. 1900. 8vo. 10 fr.

[The first volume of the translation appeared in 1899: the second now completes it.]

BAMBERGER (L.). Ausgewählte Reden u. Aufsätze üb. Geld- u. Bankwesen. Berlin: Guttentag. 1900. 8vo. pp. 510. 9 m.

[In Schriften des Vereins zum Schutz der deutschen Goldwährung.]

BASTABLE (C. F.). La théorie du commerce international. Traduit sur la 2ᵉ édition anglaise, revue par l'auteur. Paris: Giard et Brière. 1900. 12mo. 8 fr.

BULLOCK (C. J.). Introduction to the Study of Economics. New and revised edition. New York: Silver, Burdett & Co. 1900. 12mo. pp. 512. $1.25.

[In the revision the chapter on Value has been rewritten, and a new chapter added on Public Expenditures and Revenues.]

GEORGE (Henry). Our Land and Land Policy. New York: Doubleday, Page & Co. 1900. 8vo. pp. 400. $2.50.

[Announced. Reprinted essays; the first, which gives the volume its title, being the early paper from which Progress and Poverty sprang.]

GOLOWIN (K.). Russlands Finanzpolitik u. die Aufgaben der Zukunft. Aus dem Russ. v. M. Kolossowski. Leipzig: O. Wigand. 1900. 8vo. pp. 233. 4.50 m.

HOWELL (George). Trade Unionism, Old and New. Third edition, revised and enlarged. London. 1900. 8vo. 2*s.* 6*d.*

[Organization of labor; rise and progress of combinations of workmen; trade unionism, its origin,

development, and progress; the "old trade unionism," constitution and government, provident benefits, and strike pay; the "new trade unionism," chief characteristics; State aid, State regulation, and State control; the work of trade unions and progress of labor, 1890–1900.]

KAUFMANN (R. de). La politique française en matière de chemins de fer. Paris: Béranger. 1900. 8vo. pp. 1,000. 30 fr.
[Translated, revised, and preceded by a supplementary study by Frantz Hamon, sous-chef de bureau of the French ministry of finance.]

LEVASSEUR (E.). Histoire des classes ouvrières et de l'industrie en France avant 1789. Deuxième édition, entièrement refondue. Paris: A. Rousseau. 1900. 8vo. 2 vols.
[Announced; Volume I. to appear in September, Volume II. at the beginning of 1901. The first edition, published in 1859, has long been out of print.]

RAE (J.). La journée de huit heures. Traduit par G. F. Starck. Paris: Giard et Brière. 1900. 8vo. pp. 363. 6 fr.

SAY (Léon) et CHAILLEY-BERT (J.). Nouveau dictionnaire d'économie politique (2 vols.). Paris: Guillaumin. 1900. 8vo. 69 fr., bound.
[Second edition, containing a supplement.]

## XIII. NOT CLASSIFIED.

ADAMS (Brooks). America's Economic Supremacy. New York: Macmillan Co. 1900. 12mo. pp. 230. $1.25.
[Six reprinted papers on the Spanish War and the Equilibrium of the World, the New Struggle for Life among Nations, England's Decadence in the West Indies, Natural Selection in Literature, the Decay of England, Russia's Interest in China. The title does not describe the contents of the volume, which is concerned with political questions more than with economic.]

ALLIX (Edgar). Des reports dans les bourses de valeurs. Paris: Giard et Brière. 1900. 8vo. 6 fr.
[The author is docteur ès sciences and lauréat of the École des sci. pol. Part I. considers the financial aspects of these stock exchange transactions; Part II., the legal questions involved. Comparison is made with foreign practices.]

AMERICAN ACADEMY of Political and Social Science. Corporations and the Public Welfare. New York: McClure, Phillips & Co. 1900. 8vo. pp. 208. $1.50.
[Addresses at the meeting of the Academy in April, 1900, on (1) Control of Public-service Corporations, by Messrs. Rowe, Coler, Gray, Speirs: (2) Influence on Political Life, by Senator Lindsay; (3) Combinations, by Messrs. Dill, Wanamaker, Baldwin; (4) The Future of Protection, by Senator Aldrich and Messrs. Porter, Miller.]

ANNALES de l'Institut International de Sociologie. Vol. VI. Paris: Giard et Brière. 1900. 8vo. 7 fr.
[Contains papers by Achille Loria, entitled "La Sociologie Glottologique," by M. Kovalewsky on Comparative Law and Sociology, by R. de la Grasserie upon Theocracy, as well as articles on department stores, co-operative societies, and "the movement of humanity."]

CARNEGIE (A.). The Gospel of Wealth, and Other Essays. New York: Century Co. 1900. 8vo. pp. 305. $2.

CLEWS (Henry). The Wall Street Point of View. New York: Silver, Burdett & Co. 1900. 12mo. pp. xiv, 290. $1.50.
[Discursive chapters on a large array of subjects,—railways, tariff, trusts, speculation, recent financial and political history,—with no new note struck in the whole.]

COLLIER (W. M.). The Trusts: What can we do with them? What can they do for us? New York: Baker & Taylor Co. 1900. 12mo. pp. 348. $1.25; in paper, 50 cts.

[A rational survey, though not offering much novelty: "Abolish special privileges, prevent unfair, 'cut-throat' competition, compel corporations to sell to all on equal terms, give full publicity, prevent over-capitalization, make corporations honest, and competition, we believe, will do the rest."]

CONANT (C. A.). The United States in the Orient: The Nature of the Economic Problem. Boston: Houghton, Mifflin & Co. 12mo. $1.50.

[Contents: The Economic Basis of Imperialism; Russia as a World Power; Can New Openings be found for Capital? The New Economic Problems; The Economic and Political Problem for the United States: Their Advantages in the Competition for Commercial Empire.]

HARPER (Wm. H.). "Restraint of Trade": Pros and Cons of Trusts in Facts and Principles. Chicago: The Author. 1900. 8vo. pp. 368. 50 cts., paper.

[A classified collection of opinions from various sources on the several aspects of the trust problem.]

JENKS (J. W.). The Trust Problem. McClure, Phillips & Co. 1900. 12mo. pp. 281. $1.

[Contents: The Wastes of Competition; Favors to Combinations; Combination and Monopoly; Promoter and Financier; The Basis of Capitalization; Organization and Management; Prices (Sugar, Whiskey, Petroleum, Tin Plate); Wages; Political and Social Effects; Legislation. An appendix reprints some documents and the proposed New York Companies' Act. The book gives the results of years of discriminating, long-continued investigation.]

KLIMBURG (R.). Die Entwickelung des gewerblichen Unterrichtswesens in Oesterreich. Tübingen: Mohr. 1900. 8vo. pp. 240. 7 m.

[In Wiener staatswissenschaftl. Studien.]

MAYER (M., docteur en droit). Le secret des affaires commerciales. Paris: Rousseau. 1900. 8vo. pp. 284. 6 fr.

PARSONS (Frank). The City for the People. Philadelphia: F. C. Taylor. 1900. 12mo. pp. 595. $1.

[Chiefly on Public Ownership, which is advocated unreservedly, without admitting any possible drawback; with chapters also on Direct Legislation, Home Rule for Cities, Merit System, and the like.]

SCHLEFER (Dr. A.). Das Volkseigentum an den Bergwerken. Ein Beitrag zur Frage der Verstaatlichung der Kohlenbergwerke. Vienna: M. Perles. 1900. 8vo. pp. 58. 1.20 m.

SERGI (G.). La decadenza nelle nazioni latine. Turin: Frat. Bocca. 16mo. pp. 350. 4 l.

[Part I., Verso l' abisso; II., Risurrezione, l' educazione dell' avvenire.]

*In Periodicals.*

AVEBURY (Lord; *i.e.*, Sir John Lubbock). Municipal Trading. Contemp., July. [An unsympathetic criticism of recent proposals to extend the range of municipal undertakings.]

COMMONS (J. R.). Municipal Employment and Progress. Municipal Affairs, June. [A sober consideration of the difficulties, with proposals for remedy; *e.g.*, representation of social classes in municipal administration.]

CROWELL (J. F.). The Sugar Situation in the British West Indies. Yale Rev., Aug.

DONALD (R.). Municipal Trading: A Defence. Contemp., Aug. [A reply to Lord Avebury's article in the July number of the same review.]

FALKENBURG (Ph.) u. VAN ZEUTEN (J. H.). Das kommunale Telephonnetz in Amsterdam. Jahrb. f. Nat. Oek., 20, Heft 1.

GANNETT, (H.). Is a Timber Famine Imminent? Forum, Oct.

["When the lumberman changes his policy from that of merely reaping a harvest and abandoning the ground to one of providing for a continuous harvest year by year, the problem will be solved."]

GIFFEN (Sir R.). Our Trade Prosperity and the Outlook. Econ. Journ., Sept. [Holds that "the conditions of prosperity in Great Britain are generally stable."]

GOLDENBAUM (F.). Auflösung und Wiederherstellung der Berliner Produktenbörse. I. Jahrb. f. Gesetzg., 24, Heft 3. [Story of the failure of the German Act of 1896 to stop dealings for future delivery in grain. A concluding article is to follow.]

JENKS (J. W.). Trust and Industrial Combinations. Bulletin Dept. of Labor, July. [Results of an inquiry, supervised by the writer for the Department of Labor, on the effects of recent combinations on wages and prices; with much statistical matter.]

MEADE (E. S.). The Coal Supremacy of the United States. Forum, Oct. [The superabundance of our coal assures us a permanent and commanding advantage in foreign trade.]

PRICE (L. L.). Some Economic Consequences of the South African War. Econ. Journ., Sept.

PROVAND (A. D.). The Coal Problem. National Rev., Sept. [An English M.P. urges the appointment of a new royal commission to consider the coal supply of Great Britain.]

SCHMOLLER (G.) and LOTZ (A.). Noch ein Votum über die "politischen" Beamten. Jahrb. f. Gesetzg., 24, Heft 3. [Contributions to the lively debate over the "disciplining" of the Prussian "Landräte" who voted against the government's canal bill. Lotz is member of Parliament.]

SMITH (E. J.). Some Recent Criticisms on the New Trades Combination Movement. Econ. Rev., April. [A reply to Mr. Cannan's criticism, by the creator of the Birmingham Bedstead Combination.]

TAYLOR (B.). The Burden of Coal. Nineteenth Century, Sept. [A lament called forth by the recent rise in the price of British coal.]

WHELPLEY (J. H.). An International Wheat Corner. Fortnightly, Aug. ["A heretofore secret chapter in the diplomatic history of the United States,"—the rejection in 1896 of a proposal made by the Russian government for joint action on the price of wheat.]